

Journal of Crime
and Justice
Volume 1



The Nature of Crime: Continuity and Change

182408^{c.1}

**CRIMINAL
JUSTICE**

2000

VOLUME 1

U.S. Department of Justice
Office of Justice Programs
810 Seventh Street N.W.
Washington, DC 20531

Janet Reno
Attorney General

Daniel Marcus
Acting Associate Attorney General

Mary Lou Leary
Acting Assistant Attorney General

Julie E. Samuels
Acting Director, National Institute of Justice

Office of Justice Programs
World Wide Web Site
<http://www.ojp.usdoj.gov>

National Institute of Justice
World Wide Web Site
<http://www.ojp.usdoj.gov/nij>

182408
PROPERTY OF
National Criminal Justice Reference Service (NCJRS) c.1
Box 6000
Rockville, MD 20849-6000

The Nature of Crime: Continuity and Change

CRIMINAL JUSTICE 2000

VOLUME 1

July 2000

NCJ 182408





Julie E. Samuels
Acting Director

Eric Jefferis
Janice Munsterman
Criminal Justice 2000
Program Managers

Eric Jefferis
Richard Titus
NIJ Coordinators
for Volume 1

Findings and conclusions of the research reported here are those of the authors and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

The National Institute of Justice is a component of the Office of Justice Programs, which also includes the Bureau of Justice Assistance, the Bureau of Justice Statistics, the Office of Juvenile Justice and Delinquency Prevention, and the Office for Victims of Crime.

From the Director

The celebration of the National Institute of Justice's 30th anniversary in the autumn of 1999 provided the Institute and the criminal justice community the perfect opportunity to reflect on three decades of criminal justice research accomplishments. A few months later, the dawn of the new millennium seemed the appropriate stage from which to look forward to what lies ahead for criminal justice in the United States.

As preparations were made to commemorate the Institute's anniversary, it became increasingly apparent to NIJ staff and the criminal justice research, policymaker, and practitioner communities that there needed to be one compilation comprising a comprehensive, scholarly examination and analysis of the current state of criminal justice in the United States. Consequently, NIJ conceived and launched a project to produce the four-volume *Criminal Justice 2000* series to examine how research has influenced current policy and practice and how future policies and practices can be built upon our current state of knowledge.

The themes developed for these volumes were purposefully broad in scope, to allow contributors the intellectual freedom to explore issues across criminal justice disciplines. In its competitive solicitation, NIJ asked the authors to explore and reflect on current and emerging trends in crime and criminal justice practice, based on scientific findings and analyses. An editorial board of eminent criminal justice researchers and practitioners then selected the proposals that displayed exceptional scholarly merit and contributed to the substantive themes of the volumes.

The result, the *Crime and Justice 2000* series, reflects the state of knowledge on a broad spectrum of crime and criminal justice issues. While the volumes do not comprehensively chronicle all topics vital to criminal justice in the United States at the year 2000, we hope the essays contained in these four volumes will stimulate thought and discussion among policymakers, practitioners, and scientists in the coming years and shape future research endeavors.

Julie E. Samuels
Acting Director
National Institute of Justice



Criminal Justice 2000

Editorial Board Members

Volume 1. The Nature of Crime: Continuity and Change

Editor: Gary LaFree
Editorial Board: James F. Short
Robert J. Bursik, Sr.
Ralph B. Taylor

Volume 2. Boundary Changes in Criminal Justice Organizations

Editor: Charles M. Friel
Editorial Board: Susan Keilitz
Charles Wellford
Chase Riveland
James Jacobs

Volume 3. Policies, Processes, and Decisions of the Criminal Justice System

Editor: Julie Horney
Editorial Board: John Martin
Doris L. MacKenzie
Ruth Peterson
Dennis Rosenbaum

Volume 4. Measurement and Analysis of Crime and Justice

Editor: David Duffee
Editorial Board: David McDowall
Brian Ostrom
Robert D. Crutchfield
Stephen D. Mastrofski
Lorraine Green Mazerolle



Table of Contents

From the Director	iii
<i>Criminal Justice 2000</i> Editorial Board Members	v
Introduction to Volume 1	
The Changing Nature of Crime in America	1
<i>by Gary LaFree, Robert J. Bursik, Sr., James Short, and Ralph B. Taylor</i>	
Theoretical Developments in Criminology	51
<i>by Charles R. Tittle</i>	
The Politics of Crime and Punishment	103
<i>by William Lyons and Stuart Scheingold</i>	
Dynamics of the Drug-Crime Relationship	151
<i>by Helene Raskin White and D.M. Gorman</i>	
Criminal Justice Discovers Information Technology	219
<i>by Maureen Brown</i>	
Explaining Regional and Urban Variation in Crime: A Review of Research	261
<i>by Graham C. Ousey</i>	
Change and Continuity in Crime in Rural America	309
<i>by Ralph A. Weisheit and Joseph F. Donnermeyer</i>	
A Century of Juvenile Justice	359
<i>by Philip W. Harris, Wayne N. Welsh, and Frank Butler</i>	
Changes in the Gender Gap in Crime and Women's Economic Marginalization	427
<i>by Karen Heimer</i>	
On Immigration and Crime	485
<i>by Ramiro Martinez, Jr., and Matthew T. Lee</i>	
Appendix: <i>Criminal Justice 2000</i> Volumes and Chapters	525

The Changing Nature of Crime in America

*by Gary LaFree, Robert J. Bursik, Sr., James Short,
and Ralph B. Taylor*

Observers of the behavioral sciences have long noted the dominance of cross-sectional over longitudinal research designs, and have catalogued some of the negative consequences of this focus (e.g., Lieberman 1985). Perhaps the most important strength of this volume is that from the outset, the editors strongly insisted that all contributors had to take a longitudinal perspective in their individual chapters. Approaching crime trends from a longitudinal point of view immediately disabuses us of the idea that criminal behavior and reactions to criminal behavior are fixed, constant, and unchanging. Criminologist Gwynn Nettler (1984, 2) tells the story of two people passing on a street in New York City, one with a pint of whiskey and one with \$100 in gold coins. In March 1933, the person with the alcohol would have been committing a criminal act because of Prohibition, while the person with the gold coin was law abiding. But only a year later, the same two people passing on the street would occupy exactly the opposite positions with regard to the law: The repeal of Prohibition legalized carrying whiskey in most places, but gold hoarding was a Federal crime from 1934 to 1974. This volume describes many similar kinds of changes in crime and reactions to crime over the past half century. In particular, the contributors have thoughtfully explored the many ways in which crime and its effects have evolved along with broader structural and cultural changes in America during this time period. But the volume is not limited to discussing how crime has changed in the past. Wherever feasible, the authors have also tried to project likely crime developments and trends into the 21st century.

Gary LaFree is a Professor in the Department of Criminology and Criminal Justice at the University of Maryland, College Park. Robert J. Bursik, Sr., is a Professor in the Department of Criminology and Criminal Justice at the University of Missouri, St. Louis. James Short is a Professor in the Department of Sociology at Washington State University. Ralph B. Taylor is a Professor in the Department of Criminal Justice at Temple University.

Attempts to take stock of the American criminal justice system by pulling together the collective wisdom of a group of experts go back nearly a century in American history. Two prominent examples include the Chicago Crime Commission, established in 1919, and the Cleveland Survey of Criminal Justice, established in 1921. These early efforts to study crime in specific cities became models for later national efforts, especially the influential National Commission on Law Observance and Enforcement (the Wickersham Commission), established by President Herbert Hoover in 1929, and the National Advisory Commission on Civil Disorders, established by President Lyndon Johnson in 1967. In the first part of this introductory chapter, we briefly consider the work of these prior commissions, how their conclusions were related to the social contexts in which they were developed, and how these earlier connections compare with our own efforts to take stock of crime in the United States at the beginning of a new millennium.

The review of the work of prior crime commissions highlights a major theme of the volume: There is clear evidence of both change and continuity in crime and crime control policy over the past half century. During the last few years of the 20th century, the United States experienced several high-profile and widely publicized acts of juvenile violence, the longstanding separation between juvenile and adult criminal justice processing was steadily eroding, and national concern about youth violence was evident. In the second part of this introductory chapter, we use the issue of youth violence as a prime example of both continuity and change with regard to crime and criminal justice policy. We provide a historical overview of youth groups, collective behavior, and crime to illustrate major ways in which crime and our reactions to crime have evolved during the 20th century.

The dawn of a new century—not to mention a new millennium—naturally brings to mind not only concerns with the past but also a keen interest in the future. Of course, prediction remains the most tenuous of social science functions. Nevertheless, in the third part of this introductory chapter, we examine some of the crime-related issues that are likely to become more prominent in the years ahead. In particular, we consider likely trends in violent crimes, gun violence, and urban crime rates; the impacts of increasing numbers of ex-convicts being reintegrated into society and growing immigration; and the possibility of crime increases linked to rightwing extremism.

Finally, we conclude this introductory chapter by considering more specifically the content of the individual papers included in the volume and how the chapters fit together. The preeminent concern in this volume has been to describe changes in crime. Hence, several chapters examine how crime trends have

developed within the context of ongoing structural and cultural changes in the United States. In addition, we have included chapters that emphasize the growth in the size and complexity of the criminal justice system and the increasing importance of the scientific study of criminology.

Wickersham Commission, President's Commission, and Beyond

Only the most naive social observers believe that the current understanding of criminal behavior represents a definitive culmination of some evolutionary process that has led the field to a state of intellectual enlightenment. Certainly, all criminologists attempt to design their work so that it avoids the theoretical and analytic shortcomings of past studies. Nevertheless, it is important to appreciate the degree to which research is conducted within political, social, and historical contexts that not only shape the questions deemed to be most critical to our understanding of criminal behavior but also favor particular interpretations of the findings over others. For example, the biological sciences provided a consequential basis of criminological understanding early in the 20th century. However, the relevance of such factors had been largely discounted by the time of the 1967 President's Commission on Law Enforcement and Administration of Justice, and one is hard put to find any reference to such factors in the Commission's report *The Challenge of Crime in a Free Society* (1967). But less than 30 years later, the interaction between biological potentiality and the social environment was again considered to be a critical criminological question. Thus, while it may be tempting to reflect on certain past orientations in the field with bemused condescension, such retrospective arrogance is likely to be a source of amusement in itself to future generations. With this in mind, the editors thought it would be useful to frame the current volume within the context of two earlier federally funded projects that also were mandated to provide representative summaries of contemporary criminological knowledge: the National Commission on Law Observance and Enforcement (the Wickersham Commission, whose reports appeared in 1931) and the 1967 President's Commission on Law Enforcement and Administration of Justice.

It is important to appreciate the degree to which research is conducted within political, social, and historical contexts that not only shape the questions deemed to be most critical to our understanding of criminal behavior but also favor particular interpretations of the findings over others.

Both the Wickersham and President's Commissions were impaneled during times of significant domestic turmoil and widespread public opinion that the country was becoming increasingly violent.

Social and political background of the 1931 and 1967 reports

Both the Wickersham and President's Commissions were impaneled during times of significant domestic turmoil and widespread public opinion that the country was becoming increasingly violent. Because the Uniform Crime Reports (UCR) program had just been initiated in 1930, it is difficult to determine the nature of national crime trends at the time of the Wickersham report. However, it is clear that Prohibition did not have the desirable effects envisioned by President Hoover when he referred to it as a "noble experiment." Rather, many large urban centers had become dangerous battlegrounds as rival factions of organized crime fought for the control of

bootlegged liquor distribution, often staking their claims to a territory by gang-related "drive-by shootings" that were similar to those that caused great concern at the end of the 20th century. In addition, it had become increasingly apparent that these gangs had formed alliances with law enforcement personnel in some cities, leading to public outcries concerning police corruption. In fact, three of the reports issued by the Wickersham Commission (nos. 1, 11, and 14) are devoted at least in part to this problem.

The ethnic composition of the major organized crime groups in the early part of the 20th century added significantly to the virulence of the anti-immigrant sentiments that had been growing in the United States since the latter part of the 19th century. Highly influential public figures argued that the violent nature of many American cities was due largely to the activities of non-native groups that were culturally or inherently criminal. These sentiments were an important consideration in the passage of the Immigration Act of 1921, which capped the number of people who could migrate into the United States from a particular country at 3 percent of that group's resident population as of the 1910 census. These restrictions were tightened further in the Immigration Act of 1924 (also known as the National Origins Act or the Johnson-Reed Act), which decreased the quota to 2 percent. Since the members of the Wickersham Commission were appointed shortly thereafter (1929), it is not surprising that one of the Commission's volumes (Abbott 1931) explored the immigration and crime issue.

Joseph Gusfield's (1963) classic analysis of the dynamics that culminated in the enactment of Prohibition suggests that the concerns that were expressed about the criminogenic nature of foreign populations reflected a broader set

of issues than simply crime per se. The transition of the United States from a primarily agrarian to a primarily industrial society was accompanied by rapid increases in the population of urban centers. A large part of this growth was due to the influx of immigrants with cultural heritages (including the social uses of alcohol) that differed substantially from those that historically had dominated American life. The increasing prevalence of such lifestyles was considered by many to be a moral challenge to the inherent righteousness of the “traditional” American value system. Gusfield argues that the Volstead Act was, in part, an effort to formally acknowledge the primacy of these traditional values in the centerpiece of the American political system: the Constitution.

The Roaring Twenties also was a period in which many white, native adults feared that “innocent” white youths were being seduced by the evils associated with both immigrant and African-American lifestyles. The two major villains in this regard were the music and movie industries, which, it was felt, were undermining traditional morals by glamorizing the sensuous thrills associated with jazz, dancing, drug and alcohol use, and premarital sex. Thus, at the time that the Wickersham reports were produced, many thought that the “American way of life” was in danger. Finally, although the devastating effects of the stock market crash of 1929 would not be fully appreciated until after the publication of the Wickersham reports, it was apparent that the post-World War I era of prosperity had come to an end, and that the country was facing a major economic crisis. The potential effects of this crisis on criminal behavior is a theme found in several of the Wickersham volumes.

Ostensibly, the 1967 President’s Commission was appointed specifically in response to the dramatic increase in crime that occurred in the 1960s. It might appear that its report was produced in substantially different historical circumstances than were found in 1931. The United States was experiencing an unprecedented degree of economic prosperity, and the Nationality Act of 1965 had eliminated the immigration quotas that were in effect at the time of the Wickersham Commission. In addition, although the 1967 report clearly recognized that many longstanding social problems were generated by the structure of American society itself, it was written at the height of the war on poverty. Thus, it was optimistic in the sense that it emphasized the design and implementation of programs to rectify the underlying conditions generating criminal behavior.

Nevertheless, like the 1931 reports, the 1967 volume was produced at a time when many American citizens were not optimistic about the future of their country. For example, although several important pieces of civil rights legislation had been passed to address inequities in the rights of racial and ethnic

minorities, the violent urban riots of 1964 and 1965 raised doubts about the magnitude of the progress that actually had been achieved in this regard. The Kerner Commission (1968), appointed by President Johnson to determine the cause of the recent riots, concluded that the country was in the process of being divided into separate and unequal, white and black societies. Such findings led some civil rights activists to argue that meaningful change could not be achieved by working within the existing political system. Other important questions also were being raised about the legitimacy of the U.S. Government at this time, most notably because of the war in Southeast Asia. Civil rights and antiwar demonstrations were common, and it was not unusual for them to escalate into violent confrontations between protesters and police.

The 1960s also were characterized by a great deal of nonpolitical turmoil. As was the case at the time of the Wickersham Commission, many adults were troubled by an apparent decline in public morality, especially among the young. As youths became increasingly involved in the political struggles noted previously, they also were exploring alternative lifestyles that often involved drug experimentation, the adoption of non-Western religious beliefs, communal living arrangements grounded in communist or socialist philosophies, interracial partnerships, extensive sexual activity outside of marriage, and so forth. Thus, the 1960s encompassed a period of important social and political changes that struck directly at the heart of middle America's cherished values.

For many, the crime increases during the 1960s symbolized a country spinning out of control. In his acceptance speech to the Republican National Convention in 1964, presidential candidate Barry Goldwater clearly recognized this sentiment: "[T]here is violence in our streets, corruption in our highest offices, aimlessness among our youth, anxiety among our elders. There is a virtual despair among the many who look beyond material success for the inner meaning of their lives" (reprinted in Goldwater 1964). Therefore, it is not surprising that crime was only one of many social issues on which the 1967 report focused.

The evidence used by the 1931 and 1967 reports

The introductory section of the Wickersham *Report on the Causes of Crime* (1931a) presents a pessimistic view of the criminological enterprise: "[I]t would serve no useful purpose to put forth theses . . . with the certainty that it represents but one phase of the thought of the time and will not long hold the ground" (p. vii). Although Henry Anderson, a Commission member, disagreed strongly with the position, the sentiment is understandable given Morris Ploscowe's devastating review of the research literature (no. 13, vol. 1). Although Ploscowe identified several research programs that he believed were promising, he concluded that nearly all empirical work of that period was characterized by faulty

study designs, inappropriate statistical models, bad data, poorly formulated research hypotheses, and/or unwarranted conclusions.

It is hard to disagree with many of the points made by Ploscowe, especially concerning data quality. UCR was still in the development stage, and national self-reported studies of offending and victimization were a dream of the future. As a result, investigators typically were forced to collect quantitative or qualitative data from small, nonrepresentative samples of respondents, or to compile official records from agencies located, at best, in a handful of municipalities. Because of these problems, although the material published by the Wickersham Commission is provocative, the reported findings must be viewed with considerable caution.

A great deal of progress had been made by 1967. Most criminological researchers were sensitive to the methodological problems that had been highlighted by Ploscowe and, as a result, research designs had steadily improved. In addition, the discipline had become increasingly sophisticated statistically, aided by the growing availability of high-speed computers. These developments enabled criminologists to test much more complex models of criminal behavior than had been possible at the time of the Wickersham Commission.

However, the most important difference between the two periods was the nature of the data being utilized in criminological research. By 1967, the UCR program had been fully instituted, evaluated, and restructured, and its statistics were widely utilized. However, significant criticisms of UCR had also been raised, especially with regard to its potentially biased characterization of racial and class differences in criminal behavior. In addition, criminological theories were beginning to emphasize dynamics that operated at the social-psychological rather than group level, and it was impossible to conduct studies of individual propensities with UCR data because they were available only in aggregate forms (i.e., city, county, Standard Metropolitan Statistical Area, and State rates). For these reasons, criminologists began to develop alternative forms of data collection, using surveys to collect information about criminal behavior directly from people. Although the earliest of these self-reported instruments had numerous problems (see the review by Hindelang, Hirschi, and Weis 1981), this form of data collection eventually emerged as a highly reliable, alternative source of crime statistics. This development was especially fortuitous for the purposes of theory testing, since law enforcement records rarely included information about the variables that were central to most individual-level theories. In addition, for the first time, such instruments facilitated the analysis of the processes associated with criminal victimization.

Criminological methodology has continued to increase in its analytic power since 1967. A wide range of statistical techniques are utilized routinely in contemporary work and researchers use personal computers to quickly estimate complex models that were inconceivable with even the fastest machines of the 1960s. In our opinion, however, the biggest difference between the 1967 and the current criminological enterprise is in the nature of the available data. In particular, longitudinal study designs have become increasingly prevalent, thereby enabling researchers to investigate the dynamics of criminal behavior to a degree never before possible. Especially important here is the availability since 1973 of the National Crime Victim Survey. In addition, many datasets have now been archived and can be downloaded from the Internet in a matter of minutes, in effect making the entire criminological community vicarious members of the original project team. This new level of data availability has enabled criminologists to empirically question or extend already published findings to a degree never before feasible.

The theoretical explanation of crime

Given the introductory remarks found in Report no. 13 of the Wickersham Commission, it is understandable that the Commission was hesitant to posit any specific theory of criminal behavior. Nevertheless, an entire volume of the series is devoted to a model that Ploscowe considered to be highly promising because of its integrated emphasis on the social institutions of the family, the school, the community, and the economy: the social disorganization model of Shaw and McKay (1931). Subsequent parts of this introduction and several of the chapters that follow continue to draw heavily from this theoretical tradition.

The 1967 President's Commission considered a variety of explanations for criminal behavior, such as the ineffectiveness of community institutions, the reduction in the market for unskilled labor (and the ensuing discontent), racial and economic inequality, and the existence of a rebellious and oppositional youth culture. However, there was no attempt to integrate these factors into a comprehensive theory of crime and delinquency, although there are numerous references to the social disorganization model as well as Merton's (1938) differential opportunity theory and the extension of that theory by Cloward and Ohlin (1960). As such, although it provided a great deal of information about the correlates of crime and delinquency, the 1967 report made few innovative theoretical contributions to the field.

Although there have been several recent attempts to develop a "general" theory of crime (see, for example, Gottfredson and Hirschi 1990; Tittle 1995), contemporary criminology is characterized by a variety of competing conceptual frameworks. Although none of these dominate the field, most provide provocative,

complementary insights into the phenomenon of crime and the structures and dynamics that give rise to such behavior. One of the goals of the editors of this volume has been for each of the chapters included to provide not only the best empirical information about the patterns and distributions of the criminological phenomena in question but also a sense of the major conceptual models that have been used to make the phenomena meaningful.

In the next section, we consider in greater detail the evolution of one issue of paramount concern to members of both the Wickersham and President's Commissions as well as to policymakers and researchers at the beginning of the 21st century: youth violence.

Youth Groups, Collective Behavior, and Crime

Frederic Thrasher's classic book *The Gang: A Study of 1,313 Gangs in Chicago* (1927) was the first attempt to survey the extent of youth gang activity in a major city, and perhaps the first such attempt in any jurisdiction. It was hailed as "an advancement in the general-survey and case-study method" and as "superior to earlier studies of the gang in that its conclusions grow out of concrete material" (Young 1931, 525–526). Although we know little about precisely how Thrasher collected his material, it was a monumental effort involving census and court records, personal observation, and personal documents collected from young male gang members and from persons who had observed gangs in many contexts, and it took 7 years to complete.

Although Thrasher's book became a classic, an even more important source of knowledge about the collective nature of youthful delinquency during this early period is the work of Clifford R. Shaw and his several collaborators. Shaw did not write much about youth gangs, but his statistical studies consistently documented the fact that most boys who were brought before the juvenile court committed their delinquent acts in the company of others. Lengthy case studies documented patterns of friendship, the association of younger with older offenders, and the influence of organized crime and other forms of adult criminality in "delinquency areas" (Shaw et al. 1929; Shaw 1930; Shaw and McKay 1931; Shaw and Moore 1931; Shaw 1936). The ecological studies located the problem in space and in the course of urban development over time. They documented the structural parameters (economic and institutional) within which urban lives were lived—parameters that shaped the ability of communities to function, to aid in the socialization of children, and to exercise control over misbehavior. The life histories convinced Shaw and his colleagues that these conditions and processes helped to account not only for the distribution of delinquency but for

why children become delinquents and why some communities lack the ability to prevent delinquency.

Much has changed in the nearly three-quarters of a century since these publications first appeared, including the language used to describe delinquents (by themselves as well as others), which seems arcane by today's standards—for example, references to street youths as “urchins.” Foreshadowing “labeling theory,” Shaw's (1930, 103) Jack-Roller described how he felt on finding himself in a “bare, hard, and drab” reformatory cell:

Before, I had been just a mischievous lad, a poor city waif, a petty thief, a habitual runaway; but now, as I sat in my cell of stone and iron, dressed in a gray uniform, with my head shaved, small skull cap, like all the other hardened criminals around me, some strange feeling came over me. Never before had I realized that I was a criminal.

Some things remain constant, however. Gangs then, as now, sought to impress others with their strength and daring:

[R]esidents in the vicinity south of the stock yards were startled one morning by a number of placards bearing the inscription “The Murderers, 10,000 Strong, 48th and Ada.” In this way attention was attracted to a gang of thirty Polish boys, who hang out in a district known as the Bush. (Thrasher 1927, 62–63)

The Murderers apparently were involved in a good deal of criminal activity: They “broke into box cars” and stole merchandise, “cut out wire cables to sell as junk . . . broke open telephone boxes,” “took autos for joy-riding,” “purloined several quarts of whiskey from a brewery,” attacked blacks, and fought other gangs. Their primary pastimes, however, “were loafing, smoking, chewing, crap-shooting, card-playing, pool, and bowling.” Thrasher goes on to indicate that the boys “had great fun camping, flipping freights, and pestering the railroad detectives.” Their reputation “throughout the whole district” was as “a very tough outfit,” and local storekeepers “were indignant at their rudeness and thievery, and the neighbors regard them as an awful nuisance” (Thrasher 1927, 62–63). Although clearly dated, the case remains of interest because of the evident similarity between the Murderers and the “hanging” patterns of gangs today, intermixed with minor and more serious criminal behavior.

In 1963, midway between the original publication date of Thrasher's classic work and the turn of the century, the book was reissued in an abridged edition.¹ The editor of the abridgement noted that many social changes had vastly altered the gang landscape and that gang research, which previously had been largely descriptive, had changed in response to theoretical proposals and new empirical

work (Short 1963). The essay focused on assessment, especially of seminal theories advanced by Cohen (1955; see also Cohen and Short 1958), Cloward and Ohlin (1960), and Miller (1958). These competing explanations for the origin of the delinquent subculture (Cohen), variations in delinquent subcultures (Cloward and Ohlin; Cohen and Short), and the role of lower class culture in producing gang delinquency (Miller) stimulated a large body of empirical research and much subsequent theorizing.

By the last decade of the 20th century, however, events that could hardly have been anticipated by Thrasher had overtaken both theory and research. Whereas mid-century theories had outstripped empirical work and available data concerning gangs, modest theoretical advances and the large body of empirical research generated thereafter were overwhelmed by rapid, and recent, changes. Youth gangs proliferated rapidly in the United States during the 1980s and spread to many other countries (Klein 1995; Curry, Ball, and Decker 1996; Moore and Terrett 1999). Firearms—more sophisticated and more lethal than the “zip guns” of an earlier era—also became more readily available to young people (in the United States, especially; see Blumstein 1995). Weakened conventional economic, political, and family institutions lost legitimacy, contributing to rising crime rates (LaFree 1998a), and the technological revolution in electronic communication and entertainment media created heretofore unknown problems of social control.

By the last decade of the 20th century, however, events that could hardly have been anticipated by Thrasher had overtaken both theory and research. Weakened conventional economic, political, and family institutions lost legitimacy, contributing to rising crime rates, and the technological revolution in electronic communication and entertainment media created heretofore unknown problems of social control.

Change and continuity in juvenile delinquency

Against this background it is possible, nevertheless, to note both changes and continuities in knowledge concerning the collective forms taken by the delinquent and criminal behavior engaged in by the young.

- Widespread *prevalence* of youth gangs in the United States. Law enforcement agencies in all U.S. cities with populations greater than 250,000 report the presence of gangs in their jurisdictions, as do three-quarters of agencies in cities with populations greater than 100,000. This figure for suburban counties is nearly 60 percent, for small cities about 33 percent, and for rural counties about

25 percent. The latter figures for small cities and rural counties are especially recent. The average size of gangs, however, varies directly with the size of the jurisdiction reporting (nearly 75 members per gang in large cities, 30-plus in cities with populations greater than 100,000, slightly more than 20 in cities with populations between 10,000 and 100,000, and only about a dozen in still smaller jurisdictions) (National Youth Gang Center 1998).

- Change and continuity in the *ecology* of youth gangs. Although gangs have spread to areas of the United States where they did not exist previously, within jurisdictions, gangs continue to be found primarily in inner-city areas of lower socioeconomic status, as they were early in the 20th century. A major difference, however, is in the ethnic and racial composition of these areas and, correspondingly, of gangs. Unlike in Thrasher's day, U.S. gangs are now composed predominantly of minority populations, especially African-American and Hispanic, but with increasing numbers of new Asian immigrant children and children of immigrant parents (Sanders 1994; Chin 1996). Gangs and other forms of collective youth crime are also found in other countries with conditions similar to those associated with street gangs in the United States (Klein [1995] cites several Russian cities, Berlin, Port Moresby, Brussels, and Mexico City). Cities in which public housing projects are located outside central cities (e.g., Stockholm and its suburbs, Zurich, Frankfurt and surrounding cities, Stuttgart, and Melbourne) report a "commuting to turf" pattern of loosely structured, ethnically mixed groupings of young people who converge on central city areas via public transportation to engage in carousing, "smash and grab" hits on stores, rolling drunks, and robberies.
- Change and continuity in the *form* of collective youth crime and its *etiology*. Prior to the rapid diffusion of youth gangs in the United States—beginning in about 1965, but escalating after 1985 (Klein 1995)—large aggregations of gang "nations" emerged in several large cities such as Chicago and Los Angeles. The influence of these large gangs extends both to the *culture* of gangs in other areas and, through migration of gang members, to gang membership (that is, gang culture has diffused and many gang members change their communities of residence). Most local gangs are primarily "home grown," however. Many gangs—probably most, though we lack systematic data—begin as nondelinquent friendship groups, "hanging" groups, or groups formed around particular nondelinquent activities (sports, singing, dancing, etc.) (see, e.g., Schwendinger and Schwendinger 1985; Hagedorn 1988; Sullivan 1989; MacLeod 1987; Schwartz 1987; Short 1997). The primary distinguishing characteristic of all of these gangs is that they are self-determining with respect to membership criteria and group structure and behavior, and—most importantly—they are *unsupervised* by adults.

Such unsupervised youth groups become violent, and otherwise delinquent, as a result of one or more of the following processes:

- Escalation of the natural rough-and-tumble punching and wrestling that occurs among most male groups, and the association of status with fighting prowess.
- Competition with rival groups, often leading to conflict over status-enhancing or economically motivated behavior.
- Definitions of groups as gangs by others, and behavior toward them that pushes a violent identity on the group.
- Group processes that create or reinforce group cohesion based on violent or other delinquent behavior (these also often involve individual and group status).

Street gangs exhibit a great deal of diversity in behavior, organization, continuity across generations, and their relationships with other gangs and with their communities. Necessarily, they change as members age and move into adulthood. Several investigators, however, report that the age range of many gangs has expanded as fewer young adult gang members, particularly among gangs comprising minority youths, find attractive, legitimate jobs. This change has also been accompanied by an increase in violence, as many gang members have turned to selling drugs and other illegal activities to support themselves (and often their families) (see Fagan 1996; Fagan and Wilkinson 1998; Hagedorn 1998).

These changes blur distinctions between street gangs and a variety of types of youth collectivities, although it is still useful to distinguish among them. “Wilding” groups, “skinheads,” and perhaps the mass shootings that have occurred on school properties, for example, though differing among themselves, have in common the fact that they are motivated by hate of “outsiders” based on racial, ethnic, or other exclusionary criteria (see Cummings 1993). So, also, do crowds that gather to do violence to community outsiders, usually members of minority groups (Pinderhughes 1993). Violence and other delinquent activities often occur also in “staging” areas in which young people gather with friends and others to escape adult supervision (Schwartz 1987; Anderson 1998).

Drug and other “working” gangs are organized primarily around their revenue-producing activities, such as drug selling, stealing, and fencing stolen goods—all activities requiring greater organizational skills and structure than is characteristic of street gangs (Williams 1989; Padilla 1993). Also unlike street gangs, “bikers,” “punks,” and sports fanatics or “hooligans” are organized around specialized interests (Bufford 1991).²

With the exception of the latter types of groups (most of whose members appear to be disadvantaged socially, rather than economically), virtually all of these groups are primarily made up of marginalized youths—by minority ethnic and/or economic status—with poor prospects for integration in or social mobility within dominant majority societies. The excessive behavior of bikers and sports hooligans also appears to be motivated in some measure by resentment of ethnic minorities (Bufford 1991).

Youth culture

All of these groups are heavily influenced by the development and rapid growth of *youth culture* during the latter half of the 20th century. Peddled by media advertising and augmented by macroeconomic and social forces that cater to youthful fads, appetites, and dollars, youth culture is more powerful and more widely diffused than ever before. The same macroeconomic and social forces fail to provide meaningful roles for young people, resulting in a powerful combination of forces that underlie both youth culture and gang culture, including their excesses of consumption and violence.

More than 20 years ago, James Coleman noted a variety of developments that together produced youth culture throughout the United States during the 1960s, perhaps for the first time: large numbers of children born during the “baby boom” following World War II and the increasing affluence of many young people (a function of the general level of affluence in the country), thus creating a youth market with great economic power; extension of the period of education prior to entering the labor market; increased numbers of women in the workforce, which further separated mothers from youths in the home and neighborhood; the increased extent to which adults work “in large organizations where youth are not present”; and expansion of the mass media, which catered increasingly to the youth market (see Coleman et al. 1974, 114–119). These changes have accelerated throughout the 20th century and are even more pronounced today, and their influence is more global than ever.

Field researchers document the seductions of media-advertised products among all classes of young people. Among the less affluent, the effects are especially pernicious. Thefts and assaults often are associated with the acquisition of these products. Anderson (1999) describes the “zero-sum quality” that pervades the “code of the street” in the search for respect among young African-American men in the ghetto—respect that often is associated with items of clothing such as shoes and jackets (see also Anderson 1990). Sullivan identifies “mutually valorizing cultural symbols” (clothing, drugs and alcohol, and other recreational artifacts and activities) that cut across racial and ethnic boundaries and that

often contribute to theft, invidious comparison, and confrontation (Sullivan 1989, 248–249).

Observers of youth groups everywhere note that status differences within and between them tend to be highly refined. They are also extremely variable. Criteria for status within a group, or between one group and another, may be based on relative economic affluence, skills in valued activities, public appearance, school performance, or, perhaps most importantly, lifestyle differences. These bases of stratification typically also become criteria of inclusiveness and exclusiveness which, in turn, create opportunities for both friendship and rejection.

Adolescence is a period of especially intense identity formation and intense relationships and shared feelings of friendship, acceptance, and respect. Conversely, feelings of rejection and disrespect also are especially intense among adolescents, and often the basis for group and subcultural formation.

Next to families, schools are perhaps the most important contexts for adolescent friendship, achievement, and recognition. Because of this, school contexts (including the journey to and from schools) are the settings for much adolescent behavior, including delinquent and criminal behavior. On occasion, they have also been the setting for the most extreme forms of violence (e.g., mass killings by students or others alienated from their fellows or from mainstream institutions in general). Although the specific causes of such extreme alienation are complex, it seems clear that schools have been especially targeted precisely because of their importance in the lives of adolescents, as symbols of rejection by both peers and an adult world that seems far removed from adolescent concerns. The ready availability of guns at times transforms normal adolescent turmoil and conflict into deadly confrontation.

More than ever before in history, young people, targeted for commercial exploitation and isolated from mainstream adult roles and institutions, confront economic conditions beyond their control. Economic decline, severe unemployment, and the unavailability of “good jobs” are associated not only with street gangs but with their transformation into “economic gangs” (including drug gangs), and with ethnic, racial, and class-related identities and antagonisms that lead to other types of collective violence (Hagedorn 1998). These same forces alter both intergang relationships and relationships between gangs and their communities. Relationships between adults and young people, shaped by generational backgrounds and community cultures, “translate” these and other macrolevel forces at the local community level.

To the extent that law enforcement personnel, media portrayals, and public opinion all treat gang membership as a “master status” (Miethe and McCorkle

1997), gangs and gang membership contribute to the deterioration of relationships between economic, racial, and ethnic groupings in the larger society. Reification and demonization of gangs by media, law enforcement, and the public, and occasionally by scholars, often contribute to gang problems rather than to their solutions. It is important to remember that most street gang members, at least in the embryonic stages of their involvement in delinquent and criminal behavior, are still children.

A consideration of youth groups and crime shows at once the changing nature of crime in the United States, but, at the same time, shows the cyclical nature of social problems. Throughout the past century, the United States has experienced periodic waves of concern about youth violence and crime. It is important to realize that issues such as the current concern with youth violence are rarely original, but it would be misleading to jump to the conclusion that currently hot crime issues at one point in time have exactly the same characteristics as those from earlier time periods.

In the next section, we move our introductory comments into the realm of the future. Based on our review of crime and crime policy in the United States at the beginning of a new century, we offer some projections and predictions.

Predictions About Crime and the Criminal Justice System in the Years Ahead

Views about future roles of crime in American society are noteworthy for their diversity. One futurologist predicts a society with little crime by the year 2025:

The most-dreaded types of offenses—crimes such as murder, rape, assault, robbery, burglary, and vehicle theft—will be brought under control in the years ahead by a combination of technology and proactive community policing. Creation of the cashless society, for example, will eliminate most of the rewards for robbers and muggers, while computer-controlled smart houses and cars will thwart burglars and auto thieves. Implanted bodily function monitors and chemical drips (such as “sober-up” drugs and synthesized hormones) will keep most of the sexually and physically violent offenders under control. (Stephens 1995, 29)

By contrast, another futurologist sees a much more crime-ridden society in 2025: “fortified, middle-class enclaves in destroyed cities, the latter swarming with drug-crazed, poverty-stricken populations, that finally turn on those who are economically better off” (Butler 1993, 167).

Numerous scenarios about the future vie for our attention. More important than the personal question—Which do we find more engaging?—is the scientific question: What solid predictions can we make about the future? In this section, we comment briefly on the limitations of our tools for making such projections, then consider likely developments in several important areas: violent crime, lethality of violence, spatial patterning of crime, increased numbers of released offenders, and connections between immigration and rightwing extremist violence. For each point of concern, we attempt to ground the discussion in what is currently or has been recently happening. We first comment briefly on some of the challenges of forecasting and the limits of our forecasting methods.

The challenge and the methods

An old joke tells of an extraordinary weather forecasting program designed to predict the weather for the entire world for a week. The finest forecasting minds had contributed to it, and the program took into account every possible factor influencing precipitation, wind, and temperature. When the data-gathering stations were online, scientists turned to the fastest supercomputing facilities on the planet. The program ran flawlessly and generated precise descriptions—which, it turned out, were accurate—describing the expected weather at numerous points around the globe during the next 7 days. There was only one small hitch: The program took 8 days to run.

Trying to predict changes and continuities in crime in the United States over the next few years, let alone the next few decades, presents a problem even more difficult in scope than that faced by the weather forecasters described earlier. It is more difficult because crime forecasting is a social science rather than a natural science; and for social sciences, the “laws” of cause and effect are more mutable and thus fundamentally different (Winch 1958).³ Connections between the moon and tides are ironclad, whereas those between demographic age bulges in the population and juvenile delinquency are not.

In addition, two limitations of social science forecasting make accurate prediction especially challenging. All predictions have a margin of error that, by definition, increases the further away we are from the last datum gathered. In short, if a model based on objective indicators is well developed, it is most likely to provide most useful results in the near term. This is a difficulty that cannot be overcome; it is built into the nature of forecasting.

Perhaps more surmountable are limitations arising from sudden changes. In social science, trends that seem to follow a certain pattern overtime—for example, remaining flat or exhibiting stable ups and downs—nevertheless

Despite the growing availability of such sophisticated tools, making precise predictions about the future of crime and justice is likely to remain a maddening exercise.

sometimes shift unexpectedly. Consider U.S. imprisonment rates. They were relatively flat for much of this century but then began to increase abruptly in the 1970s (Blumstein and Moitra 1979; Lyons and Scheingold in this volume).

Such rapid changes can be handled by a variety of forecasting models, providing the researcher anticipates such dynamics (Swanson and White 1997). But again, as with the problem of increasing error over time, there is a built-in difficulty: How are we to know that the process or the output will change dramatically unless it has already done so?

Increasingly, sophisticated forecasting methods partially mitigate these challenges. Researchers and policymakers have had access for some time to forecasting methods such as time series analysis (Box and Jenkins 1970). With such methods, researchers can gauge impacts of policy interventions such as community corrections programs (Jones 1990) or estimate system caseloads for a component of the system (Flango and Elsner 1983). More recent tools include neural networks based on artificial intelligence (Carpenter and Grossberg 1991). These appear to have considerable potential for improving forecasts (Adya and Collopy 1998). Such techniques have been used, for example, to predict shifting crime rates in neighborhoods (Olligschlaeger 1997). These procedures are useful for forecasting because highly specific groups with complex attributes can be identified, and predictions can be made specifically for each group.

Researchers and policymakers attempting to predict what happens with a system often turn to simulations (Taylor 1994, 343–352), computer programs representing real-world processes. For example, the Minnesota criminal justice system used simulations to predict the impacts of sentencing guidelines on jail and prison populations (Brent and Anderson 1990). Researchers use simulations when addressing complex social processes that change dynamically over time, depend on a variety of conditions, and contain a certain amount of random variation (Brent and Anderson 1990, 191). Of course, the validity of a simulation ultimately depends on the validity of the theory, the model, the assumptions about the correct independent variables, and the program defining the simulation (Taylor 1994, 349).

Despite the growing availability of such sophisticated tools, making precise predictions about the future of crime and justice is likely to remain a maddening

exercise. Changes in amounts and types of crime will continue to depend on societal, technological, cultural, and international changes; the responses of the criminal justice system; and trends in public attitudes and sentiments. Such connections are extremely complex (see Lyons and Scheingold in this volume). In addition, the increasing imprecision of forecasts couched further in the future is inescapable.

We consider here some of the biggest changes in crime and the operation of the criminal justice system at the end of the 20th century and suggest how they may prove relevant to future trends in several specific areas. In each case, we highlight not just one variable but rather a cluster of conditions that may influence one another as well as crime and justice outcomes. We also describe the ways in which crime is likely to change and the factors likely to influence these changes.

Violent crime trends

Perhaps one of the questions most on people's minds in the early part of the 21st century is the likely direction of violent crime rates in the years ahead. Researchers devoted considerable attention to the dramatic violent crime increase of the late 1980s and the equally startling decline starting in the early 1990s. Numerous authors have considered possible causes of this crime boom and bust cycle, and proposed a number of explanations. These include more guns in the hands of youths (Blumstein and Rosenfeld 1998); educational, judicial, and economic institutional shifts (LaFree 1998b); more handguns among the citizenry and thus a better protected citizenry (Polsby and Kates 1998); and policing strategies that both are driven by data and pay attention to minor crimes (Bratton 1998). Marked disagreements about the causes of these recent ups and downs in violent crime rates are surpassed in contentiousness by differences of opinion as to where those rates are now headed.

One approach to offering predictions distinguishes between long-term trends and shorter term fluctuations around those trends. One recent analysis by Donohue (1998) suggests that the past 50 years have witnessed two long-term homicide trends: increasing rapidly until 1977 and then declining more slowly since. In the future, he suggests, the trend could be a continued slow decline in homicide rates, continuing either from the pre-1990s drop rate or the post-1990s drop rate, or, alternatively, a long-term upward trend beginning in the near future. He thinks the short-term fluctuation downward seen through the mid-1990s is unlikely to continue.

Despite the strengths of the forecasting methods mentioned previously, it is likely to continue to prove extremely difficult to generate accurate, long-term

forecasts of violent crime trends. Not only does the temporal reach of the predictions create challenges, but disagreement about the contributing factors, and about the relative strengths of these various contributions, is far too great.⁴

Such disagreements surfaced recently in intense debate about youth violence trends. In response to increasing juvenile homicide rates starting in the mid-1980s, researchers and policy analysts alike predicted that the country was on the verge of a wave of serious teen violence (DiIulio 1995; see also Harris, Welsh, and Butler in this volume). “There are actually two crime trends in America—one for the young, one for the mature—which are moving in opposite directions” (Fox 1996, 1). According to this view, increases in teen violence will be driven by increasing numbers of teens in the near future, high poverty rates among the families of many of these teens, and declining effectiveness of adult supervision of preteens and teens.

But others countered that such predictions were overstated and not empirically grounded (Zimring 1996). After examining juvenile arrest rates from 1980 onward, Zimring (1998) concluded that there was no single trend for all the violent crimes; rather, the movement was crime specific, and changes in arrest rates were trendless over the long term, moving in short up-and-down cycles. And because juvenile arrest rates fluctuated markedly from one year to the next, the demographic shifts in the proportion of the teen population, and its absolute size, probably played only minor roles in shifting teen violence rates. This last point is directly related to a broader discussion in criminological theory about the contribution of age distributions to changing crime or arrest rates (Lauritsen 1998; Tonry, Ohlin, and Farrington 1991; Harris, Welsh, and Butler in this volume). Probably the only safe predictions that can be made about future violent arrest and crime rates, juvenile or otherwise, are that they are unlikely to return to the low levels witnessed in the 1950s and early 1960s, and that the declines witnessed in the early 1990s, most dramatically in several large cities, are unlikely to continue.

Lethality of violence

In 1995, according to the National Crime Victimization Survey, “approximately 1.2 million violent crimes were committed with a firearm” (Wintemute 1998, 1). Many argue that the increased availability of guns has resulted in rising homicide and injury rates (Vernick and Teret 1993). In contrast, others suggest that increasing handgun availability among law-abiding citizens has kept victimization rates from going even higher (Kates and Kleck 1997) and has perhaps even driven down homicide rates (Polsby and Kates 1998).

What we do know about gun availability is that we have more guns and more illegal guns than ever before and that these guns are spread among fewer households. Nationally, over the past 20 years we have seen:

- A decreasing prevalence of households with one or more guns, from about 50 percent down to about 40 percent (Cook and Ludwig 1995).
- An increasing total number of available guns—223 million, including 40 million handguns produced in the United States since 1973 (Zawitz 1995).
- Large numbers of stolen guns (for example, 341,000 from 1987 to 1992), with many of these presumably used for illegal purposes (Zawitz 1995).

By definition, criminals have access to stolen guns. The number of stolen gun reports received by the FBI accelerated from about 50,000 per year in the early 1970s to about 300,000 per year in the early 1990s (Zawitz 1995). Many arrestees, about a third in one study, report that it would be easy for them to obtain a gun in less than a week (Decker and Pennell 1995). Numbers of available guns generally may continue to climb as international gun manufacturers, finding markets in other countries closed—Scotland recently banned all guns, for example—export more weapons to the United States (Walsh 1999).

It is extremely difficult to predict how the availability of guns will affect future crime rates. One recent study of homicide trends in New York City suggests that gun homicide rates and nongun homicide rates follow different pathways (Fagan, Zimring, and Kim 1998). Fagan, Zimring, and Kim link the homicide decline in New York City to a shift in gun homicides; although nongun homicides decreased steadily from 1985 through 1996, gun homicides increased, peaking in 1991. Similarly divergent patterns were found for gun and nongun assaults (p. 1289).

Also bearing on gun violence are policy initiatives focused on reducing the impact of guns. Historically, the impact of gun bans, or extra sentences meted out for gun crimes, is equivocal. Some appear to have worked, others have not (Loftin, Heumann, and McDowall 1983). Most recently, it appears that the passage of the 1994 assault weapons ban spurred increased production of the banned weapons prior to the deadline but contributed to a significant subsequent decline in the gun murder rate (Roth and Koper 1999). Future gun violence rates, therefore, may depend in part on whether laws are passed restricting gun purchases or requiring additional gun safety features such as trigger locks. Whether such initiatives will be passed is difficult to gauge given the extreme political volatility surrounding such issues.

Some might argue that large cities can rebuild, thus lessening rather than increasing city-suburban victimization and offending differences. But given the trends of urbanizing and segregating poor households that have actually accelerated since 1970, combined with the shift of political power to suburban locations and the increasing internationalization of trade, such a broad-based revitalization of cities seems unlikely.

How will crime be patterned spatially?

In addition to questions of level and lethality of crime, there are questions of crime distribution. One of the most durable patterns in the ecology of crime has been strong offense, and now victimization differentials, between urban, suburban, and rural locations (Boggs 1966, 1971; Harries 1980; Sampson and Castellano 1982; Weisheit and Donnermeyer in this volume).

Within cities, better-off neighborhoods will increasingly segregate themselves from surrounding worse-off neighborhoods through private policing, restricting access, or both, thus increasing between-neighborhood crime and victimization differentials. In suburban locations, gated communities used to be limited to extremely high-income locales, such as Ten Hills in California. But the number of gated communities appears to be increasing nationwide, especially as developers find that comparable houses and lots can command higher prices for gated communities. Some nonacademic writers speculate that all suburbs of the future will be gated "burbclaves" (Stephenson 1993). Some research suggests that restricted access communities may indeed be safer (Atlas and LeBlanc 1994). It seems likely, therefore, that community-level crime differences within suburbs will also increase in the future.

Moving to a broader level of analysis, increased crime differences between central cities and suburbs also seem likely as city-suburban differences in employment opportunities and educational resources increase. These differences may be further exacerbated if funds for services in cities decline with waning tax bases and weakening political clout of cities at the State and Federal levels. In some locales, efforts will be made to move lower income, city-dwelling jobseekers to suburban jobs using public transit, but these efforts are likely to be meager in comparison to the need. Far more typical may be efforts to block transit between lower income urban communities and higher income suburban locations. A recent case in Buffalo may be emblematic. After exiting a bus, a teenager was accidentally killed while cross-

ing a highway on the way to her job in a suburban mall. The attorney representing her interests found that the bus route, one that serves predominantly low-income communities in the city, had been denied access to the suburban mall, resulting, the attorneys claim, in the death of the teen (National Public Radio 1999b).

Some might argue that large cities can rebuild, thus lessening rather than increasing city-suburban victimization and offending differences. But given the trends of urbanizing and segregating poor households that have actually accelerated since 1970 (Wacquant and Wilson 1989; Wilson 1987, 1991, 1996), combined with the shift of political power to suburban locations and the increasing internationalization of trade, such a broad-based revitalization of cities seems unlikely.

A broad-based turnaround for large cities would require an unprecedented level of cooperation between large businesses and urban school systems and governments (Wilson 1996). Although some cities closely linked to the world economy may prosper (Sassen 1991), as trade internationalization interacts with information technology in how it influences and reshapes city-suburban-regional differentiation (Castells 1991), it seems unlikely that these trends will result in large numbers of revitalized and low-crime central cities.

On the other side of the argument, two broad sets of changes suggest less urban-suburban-rural offending and victimization differences. A third set of changes does not appear to imply either stronger or weaker differentials.

First, in recent decades, suburban crime has risen faster than that in cities (Alba, Logan, and Bellair 1994, 395; Logan and Messner 1987). This is understandable given the lower starting point, making large percentage increases more easily attainable.

A second factor suggesting weakening differences across types of regions, at least in terms of offending rates, is vanishing differences in prevalence rates for usage of some drugs. According to recent reanalyses of Monitoring the Future national data describing high school seniors (Cronk and Sarvela 1997; see also Weisheit and Donnermeyer in this volume), rural and urban prevalence rates for marijuana and cocaine were more similar in the mid-1990s than they were 20 years earlier. "These findings contrast with the popularly held notion that rural youth are more protected against the use and abuse of drugs by their distance from the factors supporting drug use in urban environments" (Cronk and Sarvela 1997, 764). As Weisheit and Donnermeyer observe in this volume, parallel prevalence rates in urban and rural areas, coupled with higher binge drinking prevalence rates in rural areas, may drive up rural offending rates in the future.

As most readers know, adult populations who are either incarcerated or under correctional supervision increased sizably during the last three decades of the 20th century. From 1980 to 1997 alone, the total estimated correctional population increased from 1.8 million to 5.7 million. Of those 5.7 million, 3.6 million were on probation, 0.5 million were in jail, almost 1.2 million were in prison, and about 0.7 million were on parole.

A final issue relevant to urban, suburban, and rural offending and crime victimization differentials is population redistributions across these three types of locales. But the nature of the population redistribution between metropolitan and nonmetropolitan communities in the past 30 years has been complex. Vivid images of the suburbanization of farmland and drug-selling city gangs setting up auxiliaries in small towns to serve the burgeoning teen populations there are far too simple.

For most of this century until the late 1960s, nonmetropolitan communities were losing population to metropolitan communities. Starting in the late 1960s and through much of the 1970s, that changed, with net immigration occurring in nonmetropolitan communities. But in the 1980s, rural areas again began losing population. Finally, starting in the late 1980s and continuing through at least the mid-1990s, rural communities began gaining population once more. The two periods of rural population gains, the 1970s and the 1990s, were fundamentally different. The first period of rural gain was fueled both by increasing immigration and declining outmigration in nonmetropolitan communities. The latest turnaround in the 1990s was fueled largely by declining nonmetropolitan outmigration as more households there stayed put (Fulton, Fuguitt, and Gibson 1997). These population shifts have taken place against continuities in the general population's size-of-place preferences (Brown et al.

1997). The net migration gains or losses for nonmetropolitan locations are complex in terms of age, status, income, and race. Generally, lower income, less educated, nonwhite households appear to contribute less to the net gains and losses in population than do higher income, more educated, white households. At this time, all that is clear with regard to metro and nonmetro population shifts is that there are no clear-cut, longstanding population redistribution trends that have obvious implications for crime differentials by region.

What are the general implications of all of the aforementioned factors for spatial patterns in crime? If net gains in nonmetropolitan population continue and have the same composition as seen in the 1990s migration stream, it will mean increasing numbers of attractive targets for property crime. If household protection does not similarly increase (Slovic 1978), property victimization rates

may rise in rural locations. Similarities between urban and rural teen cocaine and marijuana prevalence rates also may portend more similar offending rates between rural and urban locations.

But will these increases result in weaker differences in urban, suburban, and rural offending and victimization rates? Probably not, if we also presume that central city offending and victimization rates will continue upward as long as economic conditions and services there continue to deteriorate. So the differences by region may persist, but at a higher level. Lack of political will, increasing predominance of lower income populations in cities, continuing weakness in urban services, tax bases, and employment opportunities, and a majority of daily commutes with both suburban origins and destinations since 1990 suggest increasing long-term violence rates in cities. Such forces seem unlikely to be overcome by any as-yet unforeseeable trends, save one: an extremely severe and prolonged gasoline crisis that dramatically decreases the affordability of a suburban residence and/or job location.

Increasing numbers of released offenders

As most readers know, adult populations who are either incarcerated or under correctional supervision increased sizably during the last three decades of the 20th century. From 1980 to 1997 alone, the total estimated correctional population increased from 1.8 million to 5.7 million. Of those 5.7 million, 3.6 million were on probation, 0.5 million were in jail, almost 1.2 million were in prison, and about 0.7 million were on parole (Maguire and Pastore 1998, table 6.1).

Even though sentences for many violent crimes have lengthened considerably in response to the implementation of sentencing guidelines, truth-in-sentencing acts, and shifting public opinion, it seems undeniable that communities from which these offenders were removed will be flooded in the future with returning, released offenders. Formal and informal institutions, as well as fundamental household structures in inner-city, especially African-American, communities, already have been markedly affected by these high removal rates (Sampson 1987). From 1985 to 1995, the increase in the percent of adult African-Americans under correctional supervision almost doubled from 5.2 percent to 9.3 percent (Maguire and Pastore 1998, table 6.2). If we focus solely on those in prison or jail, during the same time period imprisonment rates for African-American males increased from 3.5 to 6.9 percent (Maguire and Pastore 1998, table 6.22).

Given what we know about formal and informal social control processes, and collective efficacy, the removal of these adults, and their subsequent return, are likely to create long-term disturbances in the communities where the removal and return rates are high (Rose and Clear 1998). Accumulation of social capital,

socialization of youths, household stability, informal social control on the street, and political leverage may all be severely compromised. One study from the early 1980s, looking at offender return rates in a number of Baltimore neighborhoods, found independent impacts of returning offender prevalence rates on perceived local informal social control, residents' confidence about their neighborhoods' futures, perceived physical and social disorder in the community, actual and perceived crime levels, and residents' fear of crime (Gottfredson and Taylor 1988). The much higher—as compared with the early 1980s—returning offender rates likely to be experienced by low-income, predominantly African-American urban communities portend serious social disruption in these locales. Moreover, problems may be further magnified by the end of the traditional welfare system in March 1999, especially if reintegration services, such as employment counseling and placement, transportation, and substance abuse counseling, are not substantially increased. Clearly, there is an extraordinary need for assistance to help both individuals and communities cope with what are likely to be substantial dislocations.

Immigration and rightwing extremism

We have witnessed incidents of violence spurred by racial hatred and extremist rightwing, antigovernment views, or both, in recent years. The Oklahoma City bombing of the Federal building in 1995 and the July 4th weekend killing spree of Benjamin Nathaniel Smith in 1999 are just two examples. These incidents and the hate groups sponsoring, or at least encouraging, their perpetrators demonstrate concern among a number of politically conservative white males about the increasingly multicultural and multicolored composition of American society. According to Matt Hale, the leader of the church with which Smith was affiliated, "Society is like a teeter totter. To the extent that people of color gain position in society, whites lose" (National Public Radio 1999a). The literature on immigration can help us understand these events by placing them in the context of recent ethnic and racial changes (see Martinez and Lee in this volume).

Immigration scholars agree that the complexion and volume of legal immigrants in this country have changed markedly in the past 40 years. They are in less agreement about the causes and impacts of those shifts.

Immigration during this century has been divided by Massey (1995) into three periods: 1900–30 ("classic era"); 1930–70 ("long hiatus"); and 1970 to the present ("new regime"). During the first period, about 80 percent of immigrants came from Europe. Immigration rates were extremely low during the following 40 years. But when immigration picked up again, starting in the late 1960s, it was no longer predominantly European. Since 1970, Europeans have made up

less than one-fifth of the immigrant stream, while those from the Americas, primarily Mexico, made up close to half (44 percent), and Asians made up more than one-third (35 percent). Volume is up as well; about 700,000 to 900,000 immigrants are currently entering annually on a legal basis, with perhaps up to 400,000 illegal aliens entering each year (Camarota 1998). The percentage of the foreign-born population has increased from 5 percent to about 8 percent in 1990, and is projected to rise to about 12 to 13 percent of the population by 2050 (Leiterman and Ryan 1999).

Not only are complexion and level different; so too are settlement patterns (Massey, Gross, and Shibuya 1994). Given the formation of many ethnic communities into effectively self-supporting enclaves (Portes and Manning 1986) that act as magnets for later waves of immigration, immigration is concentrated spatially. Six States (California, Florida, Illinois, New Jersey, New York, and Texas) currently account for about three-quarters of the immigrant population (Camarota 1998).

Immigration policy shifts that have taken place in the past 15 years include two major pieces of legislation. The 1986 Immigration Reform Control Act (IRCA) authorized sanctions against employers hiring illegal or undocumented aliens, "thereby acknowledg[ing] that U.S. demand for unauthorized migrants was an important cause of illegal migration" (Leiterman and Ryan 1999, 9). But many illegal workers enter the United States legally; estimates are that 40 to 70 percent of illegal migrant workers enter legally but then overstay their visas. IRCA also allowed amnesty for some classes of undocumented workers already in the country. Perhaps the most controversial provision of the second major piece of legislation during the period, the 1986 Illegal Immigration Reform and Immigrant Responsibility Act, is that it reduces due process available to legal and undocumented immigrants by removing judicial review in several types of cases. It also prohibits applicants from seeking legal entry for a time if they have been in the country illegally prior to their application. Although the full range of documented impacts of both of these reforms are contested, scholars do agree that each piece has had unintended consequences.

Some nonacademic scholars suggest that, as a result of current and future immigration trends, whites in America will soon lose their dominant social position (Brimelow 1995; Lamm and Imhoff 1985). As a result of these concerns, "[A]n immigrant backlash appears to be gathering force" (Massey 1995, 631). Extremist hate crimes probably represent part of that backlash. Citizen militia activity is more likely in States with more immigration (O'Brien and Haider-Markel 1998). And it appears that native unskilled laborers may indeed experience lower wages in labor sectors with higher immigrant concentrations. Studies

on this question are not entirely consistent and have used differing and sometimes contested methods, but several scholars have concluded that immigrants create additional social burdens for local authorities and adversely affect wages of native workers in unskilled occupations (Butcher and Card 1991; Camarota 1998; Center for Immigration Studies 1998; LaLonde and Topel 1991).

What to do about immigration rates is similarly debated. Some argue that restrictive quotas and harsher treatment of illegal immigrants and their employers are needed to manage the problem and have proven effective in the past (Camarota 1998). Others argue that past policies have had only unintended or adverse consequences, and that the main determinants of the volume and complexion of U.S. immigrants are political, economic, and technological developments in other countries that conspire to make the American destination attractive (Donato, Durand, and Massey 1992).

If, as some scholars argue, policy shifts play minor roles in shaping immigration, and international differences play major roles in driving immigrants to America's borders and shores, then the United States probably is looking at a future of continuous immigration, with arrivals from the Americas predominating—although Chinese newcomers may eventually outnumber the arrivals from nearby countries (Massey 1995). Complicating things is the fact that assimilation may be slowed by the reduced availability of manufacturing jobs requiring only minimal English proficiency.

Recent, current, and anticipated future immigration patterns may help explain increases in organized, extremist, rightwing violence at the end of the 20th century (O'Brien and Haider-Markel 1998). Some researchers suggest a convergence between "patriot" and militia groups concerned with the right to bear arms and the perceived overreach of the Federal Government, neo-Nazi and Klan-type groups preaching white supremacy and race hatred, and some extremely conservative "Christian" religious groups (Dees 1996, 18–21). It appears that white supremacist leaders may have repackaged some of their pro-white messages to appeal more generally to those concerned about government power and moral decay in society. The Federal Bureau of Investigation, as part of its Uniform Crime Reports, currently tracks hate crime incidents and reported almost 8,000 in 1995.

If we assume that the United States is in an ongoing state of immigration, and that the immigration trends seen since 1970 are continuing, rightwing extremist violence and hate crime incidents seem likely to continue and perhaps even to increase. Current and future immigration patterns will continue to deepen concerns among some segments of the white male population that their country is being taken away from them.

The evidence available seems to suggest that, to the extent that adverse economic impacts are created by large immigrant concentrations, those impacts are concentrated particularly among less educated, native-born persons (Center for Immigration Studies 1998). It is exactly among this population segment that membership in hate groups appears to be spreading. The Southern Poverty Law Center (1999) suggests that more than 400 hate groups were operating in the United States as of 1997, and that the number of groups increased 20 percent from 1996.

Certainly many factors beyond current U.S. immigration patterns are responsible for decreasing real wages among blue-collar workers in this country in the past 20 years: internationalization of trade, increasing computerization of the workforce, exporting of blue-collar jobs, and more. But there is some evidence that immigration may be worsening the employment plight of native-born persons seeking low-skilled jobs. And such immigration seems likely to continue. These features represent major sources of concern to rightwing extremist and militant groups; it seems likely that such groups will continue to find an audience that condones violence.

In the final section of our introduction, we consider more specifically the individual chapters that make up this volume.

The Changing Nature of Crime in America

Because much of our thinking about crime and crime policy is based on cross-sectional “snapshots,” we often seem to be trapped in what historian Eric Hobsbawm (1994, 3) has called “the permanent present.” Let us indulge ourselves for a moment and take a broader, more historical view of the past half century or so. If we take such a view, what facts about crime and the criminal justice system are most obvious? First, perhaps the most inescapable crime fact of the past 50 years is the explosive growth in street crime that began in the 1960s and extended into the 1970s. This crime boom did not lose steam until the 1990s, when crime rates fell more steeply than at any other point in the postwar period. Second, and related to the first point in complex ways, the size, complexity, and expense of criminal justice bureaucracies at all levels of government have increased dramatically since World War II. And finally, the past half century has also witnessed explosive growth in the field of criminology. The chapters included in this book address all three of these important trends.

The crime boom of the 1960s and 1970s

Of the three changes in crime and criminal justice mentioned previously, the crime boom that began in the 1960s is arguably the most important because it preceded and no doubt encouraged the other two developments. The crime boom is noteworthy in historical terms. Researchers generally agree that at least among Western nations, violent crime rates have been declining for much of the past five centuries (Johnson and Monkkonen 1996; Gurr 1981). There were especially large declines in violent crime rates in most nations in the 17th and 18th centuries. In line with these long-term trends, the United States began the post-World War II era with very low crime rates. But this situation began to change rapidly in the 1960s and 1970s. In the 12 years from 1959 to 1971 alone, reported street crime rates more than quadrupled (LaFree 1998a, 20). Thus, beginning about four decades ago, the United States broke decisively with a centuries-long tradition of declining crime rates in Western nations.

In sharp contrast to the explosion of crime in the 1960s and 1970s, as this volume was being prepared, the United States was experiencing the sharpest crime "bust" in more than half a century (LaFree 1998b). The 1990s witnessed the greatest recorded percentage drop of the postwar period for the violent street crimes of murder, rape, robbery, and aggravated assault, and the property crimes of burglary and motor vehicle theft.

Although the South has dominated homicide statistics, robbery rates in the Northeast have exceeded other regions during most of the postwar period, while the West has dominated in burglary rates.

We devote more than half of this book to considering various aspects of these crime trends. Five of the chapters in volume one deal directly with changing crime patterns over the past 50 years as seen through the lens of several important structural and cultural contexts. Thus, Graham Ousey reviews urban crime trends and research efforts to understand these trends. Philip Harris, Wayne Welsh, and Frank Butler examine how juvenile justice systems have evolved along with, and sometimes in contrast to, changing crime rates. Ramiro Martinez, Jr., and Matthew Lee examine the evolving links between immigration and crime in the past half century. Karen Heimer looks at

how women's crime rates have changed along with the social and economic status of women. And Ralph Weisheit and Joseph Donnermeyer examine how crime trends have changed in rural America over the past four decades.

Urban areas have long been linked to crime in the popular imagination. Graham Ousey considers the insights and conclusions provided by a half century of research on crime in cities, metropolitan areas, and regions of the country. He documents the South's well-known high homicide rates but also shows that Southern rates have converged somewhat with other regions in recent years. Moreover, although the South has dominated homicide statistics, robbery rates in the Northeast have exceeded other regions during most of the postwar period, while the West has dominated in burglary rates. Early research on regional variation in crime focused especially on Southern and non-Southern differences in homicide, looking especially to culture of violence and economic deprivation arguments. Ousey concludes that, although culture of violence arguments have sometimes been supported, support for economic deprivation arguments has been more consistent.

Ousey shows that regardless of city size, crime rates increased substantially during the postwar period. While homicide and robbery rates were consistently highest in the largest cities (population over 500,000), burglary rates have generally been highest in cities with 250,000 to 500,000 persons. Studies examining variation in crime across cities and metropolitan areas have emphasized social stratification and social control explanations. Ousey finds a good deal of support for social stratification arguments based either on absolute measures of economic deprivation such as poverty or on more relative measures such as income inequality. Likewise, Ousey concludes that measures of informal social control such as family structure and residential stability are consistently linked to crime. Recent research reviewed by Ousey also shows that neighborhoods with more effective sources of informal social control, such as stronger social ties and more effective peer supervision, have lower crime rates.

Although crime may be closely linked to urban areas in the public imagination, Ralph Weisheit and Joseph Donnermeyer argue convincingly that the crime problems faced by the 65 million residents of the United States who live in rural areas should not be ignored by policymakers. They point out that the study of rural crime has the potential of making important contributions to crime policy, as well as to criminological theory and research methods. Weisheit and Donnermeyer argue that economic, demographic, and technological factors interact with geography and culture to shape crime in rural America in ways that are often distinctive from urban and suburban patterns. Perhaps most basically, the physical distance and isolation of rural areas affects crime and responses to crime in complex ways: Assaults become murders because of the distance of medical facilities; battered women have greater difficulty reaching shelters; community-oriented policing strategies are more complicated to implement. Weisheit and Donnermeyer argue that compared with urban culture, rural culture is distinguished by its greater

reliance on informal social control, mistrust of government, and reluctance to seek assistance from outside the community.

Economic conditions also distinguish rural from urban areas, although the diversity of rural economies makes generalization difficult. Although many rural areas adjacent to larger metropolitan areas have experienced rapid growth in economic activity in recent years, many remote rural areas are facing increasing poverty, unemployment, and underemployment. Technology continues to have important and diverse impacts on rural communities: in some cases, reducing the impact of geographical isolation (e.g., cellular telephones, computers); in others, greatly changing economic productivity (e.g., pesticides, herbicides, and concentrated fertilizers); and in still others, raising opportunities for new crime types (e.g., theft of increasingly expensive farm chemicals and agricultural machinery).

Patterns of crime are also distinct in rural areas. Rural areas are more racially homogenous than urban areas. In general, rural crime is less common than urban crime, although there are important exceptions. Weisheit and Donnermeyer show that during the past 20 years, cities with populations of more than 250,000 have had violent crime rates that are 5 to 8 times higher than rural counties and property crime rates that are 3 to 4 times higher than rural counties. Similarly, rural areas have generally had lower rates of violent crime victimization than either cities or suburbs. However, the ratio of rural to urban crime was lower in the late 1990s than at any point in the previous 20 years and the authors show that differences between rural and urban areas are smaller yet for illicit drug use, domestic violence, and crimes involving alcohol abuse.

Of course, discussions about U.S. crime trends that focus on total rates for urban or rural areas provide little information about the tremendous variation in crime observed across individual-level characteristics. Two characteristics that have been consistently correlated with street crime rates both in the United States and elsewhere are offenders' age and gender. In addition, connections between immigration and crime have generated a good deal of public concern throughout much of the 20th century. To better understand crime trends in post-war America, we also consider how crime has changed across age and gender groups, as well as how crime has been related to immigration patterns.

For the past century at least, the most critical age-related issue with regard to criminal offenders has undoubtedly been the one that legally separates juveniles from adults. Philip Harris, Wayne Welsh, and Frank Butler examine changes in how the public and the juvenile justice system have defined and treated juveniles charged with crime and delinquency during the 20th century. They identify four historical periods that are especially important. They argue that the

Refuge Period (1824–98) marks the beginning of the scientific study of delinquency and ends with the establishment of the first American juvenile court in Chicago in 1899.

According to Harris, Welsh, and Butler, the Juvenile Court Period (1899–1960) represents the triumph of positivist criminology, with its emphasis on observable, measurable events, over classical beliefs in the free will and personal responsibility of the individual. The early part of this period includes the pioneering work of Chicago School sociologists like Clifford Shaw and Henry McKay and ends with influential classics such as Cohen's *Delinquent Boys* and Cloward and Ohlin's *Delinquency and Opportunity*. The hallmark of this period is the belief that science can direct policymakers to understand, control, and prevent juvenile delinquency.

Harris, Welsh, and Butler argue that the Juvenile Rights Period (1961–80) represents the high water mark for the view that criminogenic environments rather than defective individuals account for most delinquency. Labeling perspectives, supporting a policy emphasis on prevention, diversion, and deinstitutionalization rather than punishment, are emblematic of the period. Contrary to the previous period, in which active efforts at rehabilitation were judged to be the best way to approach juvenile delinquency, during the Juvenile Rights Period, there was considerable support for the idea not only that the juvenile justice system did not reduce juvenile delinquency but that the stigmatization and decline in self-esteem brought on by official processing could actually increase the chances of further delinquency.

The authors argue that starting in 1981, juvenile justice in America has entered a fourth period that they characterize as the Crime Control Period. They argue that this period has marked a major return to classical principles that hold juveniles more strictly accountable for the choices they make and emphasizes deterrence and incapacitation over prevention and rehabilitation.

Harris, Welsh, and Butler point out that throughout its history, the juvenile justice system has been based on two often contradictory goals: to address the special needs and vulnerabilities of youths and to protect society from the delinquency

One of the most persistent findings in criminology research in the United States and elsewhere is that men commit more crime than women. Given the landmark changes in the economic, political, and social status of women since World War II, many researchers have predicted a gradual convergence between crime rates for women and men.

of youths and proto-criminals. The authors note that, regardless of the specific focus of the juvenile justice system over the past century, the system has consistently processed marginalized youths—mostly immigrants' offspring in the early part of the 20th century and increasingly children of color toward the end of the 20th century.

One of the most persistent findings in criminology research in the United States and elsewhere is that men commit more crime than women. Given the landmark changes in the economic, political, and social status of women since World War II, many researchers have predicted a gradual convergence between crime rates for women and men. Thus far, researchers have not agreed either on the amount of actual convergence in women's and men's crime rates or about an explanation for any convergence observed. Karen Heimer argues that there has indeed been a sizable increase in street crime rates of women compared with men during the last four decades of the 20th century, and that the best explanation for this increase is the economic marginalization of women. Heimer shows that women's share of arrests for seven different property crimes (larceny, forgery, embezzlement, burglary, motor vehicle theft, stolen property, and arson) and three violent crimes (robbery, aggravated assault, and other assault) all showed substantial increases from 1960 to the present. The only crime for which women showed a declining rate vis-a-vis men during this period was murder. Many of the increases in female-to-male crime were substantial. Heimer concludes that these increases occurred because of a decline in male crime rates coupled with increases, or smaller declines, in female crime rates.

After reviewing major theoretical explanations for the female-to-male crime ratio, Heimer argues that there is greatest support for an economic marginalization argument. This argument proposes that the increased financial hardship faced by women relative to men in recent decades is a root cause of the narrowing of the gender gap in crime. Heimer shows that the argument is generally consistent with trends in key economic measures during the past four decades. In particular, the proportion of total households that are female-headed, the percentage of poor persons residing in female-headed households, and the rates of female unemployment all trend upward along with the female crime ratio. Heimer also offers suggestions for extending and refining the economic marginalization argument.

As discussed earlier in this introduction, there have been two major waves of immigration to the United States during the past century. The first began at the turn of the 20th century, slowed in the 1920s, and consisted mainly of Europeans. The second began in the mid-1960s, peaked in the early 1990s, and consisted mainly of Afro-Caribbeans, Asians, and Latin Americans. The chapter

by Ramiro Martinez, Jr., and Matthew Lee demonstrates that in both cases, the American public has reacted to immigration waves by assuming that immigrants have disproportionately contributed to rising crime rates. These attitudes have been especially important during the recent immigration wave because some of the years in which immigration has been greatest have coincided with the crime boom of the 1960s and 1970s.

Martinez and Lee review three major theoretical explanations for a linkage between immigration and crime: opportunity structure, cultural approaches, and social disorganization. In fact, the authors note that all three of these theoretical explanations would lead us to expect that compared with native-born Americans, immigrants would be more frequently involved in crime. For example, immigrants face acculturation and assimilation problems that most natives do not, and immigrants more often settle in neighborhoods whose structural characteristics (e.g., poverty, ethnic heterogeneity) may be favorable for crime. But Martinez and Lee show that despite these expectations, the research literature, both from the wave of immigration at the beginning of the century and at its end, generally show that immigrants are typically underrepresented in crime statistics. The authors point out that societies might in fact profit from efforts to learn why immigrant groups generally have lower crime rates than the structural characteristics of the communities they live in might predict.

The growth in size, scope, and complexity of criminal justice bureaucracies

One of the enduring ways in which the crime boom of the 1960s and 1970s affected American society was by greatly increasing the size, scope, and complexity of the bureaucracies in America dedicated to controlling crime. The change is perhaps the most unprecedented at the national level. Because the United States began as a loose federation of local governments, criminal justice issues were historically viewed as State and local issues. But starting in the 1960s, law and order increasingly have become national political issues (LaFree 1998a, 2). Every presidential election campaign since the early 1960s has prominently featured crime and law-and-order issues. Both Congress and the President now routinely discuss crime policy and bring forward new crime-related spending initiatives and laws. The Violent Crime Control and Law Enforcement Act of 1994 was one recent example. The Federal Government now supports huge national bureaucracies aimed at crime control. But expansion of the size and scope of the criminal justice system also has been dramatic at the State and local levels. Total per capita spending on the police by Federal, State, and local governments increased more than sevenfold in constant dollars since 1950. Increases in per capita correctional costs were even greater—more

than a 15-fold increase in constant dollars since 1950 (U.S. Bureau of the Census 1996, 1; U.S. Bureau of the Census 1985, 26–28). The impact of these changes as we enter the new century is likely to be considerable.

Three chapters of this volume consider the changing size and scope of the crime control bureaucracy in the United States from three perspectives. First, William Lyons and Stuart Scheingold discuss the changing politics of crime and punishment and the impact of these political processes on corrections in the postwar period. Second, Helene Raskin White and D.M. Gorman examine the link between drug abuse and crime—an area in which expansion of law enforcement activities during the past 40 years has been especially consequential. And finally, Maureen Brown explores the incredible growth in the complexity of criminal justice systems by examining how information technology has penetrated criminal justice processing since World War II.

Lyons and Scheingold begin their chapter with the provocative premise that crime control policy is politically constructed. A key implication of this premise is that policy is driven more by politics than criminological research or even demonstrable policy effects. In particular, they take aim at the political processes that have resulted in the unprecedented growth in the scope and severity of punishment in the United States, especially since the 1970s. They argue that empirical support for direct causal links between crime rates and criminal justice policies such as zero-tolerance policing, increasing sentence lengths, and the return of capital punishment is at best inconclusive. They are especially critical of justifications for the unprecedented growth in prison populations in the United States. They argue that even if claims about the impact of harsher punishment on crime are partially true, any benefits must be weighed against the costs of punitive policies. The authors claim that the punitive policies that have held sway in the United States for at least the past 30 years have been especially destructive—exacerbating racial cleavages and shattering the social organization of the communities from which the majority of prison inmates are drawn. They argue that criminal justice policy based mostly on punishment is ultimately destructive because it diverts attention, energy, and resources away from strategic responses grounded in prevention.

In no area of law enforcement are changes in the scope and size of the criminal justice system over the past several decades more obvious than in law enforcement aimed at drug abuse. Moreover, the increasing importance of Federal law enforcement in crime control is especially clear with regard to drug policy. The implicit, and often untested, assumption behind the policy push to get tougher on drug use during the last several decades of the 20th century has been the presumed link between drug abuse and other types of crime. In a comprehensive review, White and Gorman examine the research connecting drugs to crime

over the past half century. They expose inconsistencies and defects in past attempts to specify connections between drug use and crime. Using national and city-level datasets, they show that connections between drugs and crime vary by city and that no uniform association exists between any specific type of drug use and any specific type of crime.

After reviewing trends in drug use and crime, White and Gorman present evidence of three main ways in which drugs and crime may be connected: Drug use causes crime, crime leads to drug use, or some type of common cause exists between the two behaviors. Their review indicates that none of these three models fits all types of drug use and crime. Rather, the drug-using/crime-committing population is heterogeneous; multiple paths may lead to either drug use or crime. Following their review, the authors consider policy options and promising new research directions.

In a paper that is considerably more positive about the role of the criminal justice system in crime control, Maureen Brown reviews the rapidly expanding impact of information technology (IT) on criminal justice bureaucracies during the past half century.

Although IT has undoubtedly had revolutionary effects on many aspects of American life, both its current and its potential impacts on criminal justice are arguably even more far reaching. Brown provides an intriguing history of some of the major milestones passed by criminal justice bureaucracies as they have adopted to evolving IT capacities. Different segments of the criminal justice system have moved ahead at different rates, with courts generally leading the way and corrections lagging farther behind.

Brown also traces changes in computer-related crime, considering some of the problems it has posed for law enforcement officials and policymakers. As recently as the 1970s, there were virtually no specific laws against computer crime at any level of government. Instead, the few computer crimes that were prosecuted were processed under existing statutes such as embezzlement or theft. By contrast, by the end of the 20th century, 49 of 50 States plus the Federal Government had enacted at least some legislation specific to computer crime, with more specific regulation likely to follow. Moreover, as computers become ever more closely linked to economic, political, and social systems throughout the world, there is growing recognition that the regulation of computer crime is a global issue.

Brown also considers the evolving implications of criminal justice adoption of IT for individual civil liberties, especially the right to privacy. America's concerns about individual privacy have deep historical roots and are grounded in

guarantees set forth in the American Constitution. As the IT revolution gathers steam, it raises increasingly thorny problems relating to the balance between individual rights and law enforcement effectiveness. IT provides criminal justice bureaucracies with an unprecedented ability to investigate, persecute, and control the citizenry. At the same time, IT provides potential lawbreakers with new tools to avoid detection and prosecution. Brown provides a brief glimpse at how some of these issues have evolved along with the growing criminal justice dependence on IT.

Brown concludes that despite the tremendous advances from IT applications in criminal justice processing, major challenges remain. In terms of adapting to IT, the various components of the criminal justice system have to develop more effective methods of information sharing, they must face the ongoing problem of supporting the IT changes already implemented, and they must continue to mediate the boundary between individual privacy and the growing demand for public access. In terms of law enforcement, the explosion of IT has forced criminal justice agencies to face the challenges posed by investigating and prosecuting crime types that not only are expanding exponentially but also are increasingly rendering meaningless the traditional concept of local, regional, and even national jurisdiction.

The explosive growth of criminology

A final area of extraordinary change related to crime in the United States has been in the explosive growth of criminology as a field of study and a science over the past several decades. Membership in the American Society of Criminology—now the largest criminology association in the world—increased from just 7 when it was founded in 1941 (Morris 1975) to nearly 3,000 in 1998 (Zahn 1999, 1). At the close of the 20th century, there were 18 freestanding Ph.D. programs in criminology, as well as dozens of programs operating as separate schools or as specialty areas within sociology and other departments. More graduates and undergraduates now pursue courses and degrees in criminology than in most other social science disciplines, and criminology has become one of the fastest growing college majors in the United States. This growth in criminology has been accompanied by a corresponding explosion in criminology-related research.

In the lead article of this book, Charles Tittle makes a herculean effort to review the most important theoretical developments in 20th-century criminology. Tittle begins by dividing the field into four categories: theories of individual differences in offending, theories of variation in offending through the life cycle, theories of diversity of crime rates among social entities, and theories of differences among social situations in criminal outcomes. Tittle divides the section on individual differences in offending into six major themes: (1) personal

defects, (2) learning, (3) strain or deprivation, (4) identity, (5) rational choice, and (6) control/integration. Throughout the chapter, Tittle shows how theories have evolved over time and points out connections, integrative trends, and cross fertilizations among theoretical strands. Tittle concludes that criminological theorists have made great strides, particularly in the past two decades, and as a result are now able to outline broadly the causes of crime. However, he concludes that much work remains to be done, particularly in terms of moving beyond large-scale, aggregate generalizations to more precise explanations and predictions. Tittle sees as promising a growing belief among criminologists in the importance of theory and theory development, greater integration in theory building, and research directly informed by theoretical concerns.

In this volume, we find ourselves somewhat precariously balanced between the “Scylla” of accurately capturing the past and the “Charybdis” of reliably predicting the future. Both present great challenges. Playwright Harold Pinter captured the precariousness of describing the past when he referred to it as “what you remember, imagine you remember, convince yourself you remember, or pretend to remember” (in Bowden 1998, 56). But author and philosopher Mark Twain is no more optimistic about our ability to predict the future: “[P]rophecy is a good line of business, but it is full of risks” (in Granger 1980, 211). We have prepared this volume in the early part of the 21st century both to provide a record of where crime in America has been over the past half century and to offer a few glimpses into where it is going. After reviewing earlier attempts to characterize the nature of crime in America, we approach this undertaking with great humility.

Notes

1. The abridgement appeared just after Thrasher’s death (Dodson 1962).
2. For an excellent discussion of these types of collectivities, see Klein (1995, ch. 2).
3. There is a realm of subjective forecasting in which those involved in an organization, profession, or problem make short-term forecasts about what will happen in the next week, month, quarter, or year, for example. Such subjective forecasts may prove useful when those making the forecast are closely involved with the issue under consideration and the forecast is for a discrete unit, such as a corporation. For the types of issues under consideration here, however, forecasts based on available data are preferable.
4. Some historians of violence (e.g., Lane 1997) suggest that the long-term decline in violence accompanying industrialization since the mid-1800s may have reversed after the mid-1900s in response to increasing deindustrialization.

References

- Abbott, Edith. 1931. *Report on crime and the foreign born*. National Commission on Law Observance and Enforcement Report no. 10. Washington, D.C.: U.S. Government Printing Office.
- Adya, M., and F. Collopy. 1998. How effective are neural networks at forecasting and prediction: A review and evaluation. *Journal of Forecasting* 17:481–495.
- Alba, R.D., N.A. Denton, S.J. Leung, and J.R. Logan. 1995. Neighborhood change under conditions of mass immigration: The New York City region, 1970–1990. *International Migration Review* 29:625.
- Alba, R., and J. Logan. 1991. Variations on two themes: Racial and ethnic patterns in the attainment of suburban residence. *Demography* 28:431–453.
- Alba, R.D., J.R. Logan, and P.E. Bellair. 1994. Living with crime: The implications of racial/ethnic differences in suburban location. *Social Forces* 73:395–434.
- Anderson, Elijah. 1999. *Code of the street: Decency, violence, and the moral life of the inner city*. New York: W.W. Norton.
- . 1990. *Streetwise: Race, class, and change in an urban community*. Chicago: University of Chicago Press.
- Anderson, Henry W. 1931. Separate report of Henry W. Anderson. In *Report on the causes of crime*. National Commission on Law Observance and Enforcement Report 13, vol. 1. Washington, D.C.: U.S. Government Printing Office.
- Atlas, R., and W. LeBlanc. 1994. Environmental barriers to crime. *Ergonomics in Design* (October): 9–16.
- Blumstein, Alfred. 1995. Violence by young people: Why the deadly nexus? *National Institute of Justice Journal* 229:2–9.
- Blumstein, A., and S. Moitra. 1979. An analysis of the time series of the imprisonment rate in the United States: A further test of the stability of punishment hypothesis. *Journal of Criminal Law and Criminology* 70:376–390.
- Blumstein, A., and R. Rosenfeld. 1988. Explaining trends in U.S. homicide rates. *Journal of Criminal Law and Criminology* 88:1175–1216.
- Boggs, S.L. 1971. Formal and informal crime control: An exploratory study of the urban, suburban, and rural orientations. *Sociological Quarterly* 12:319–337.
- . 1966. Urban crime patterns. *American Sociological Review* 30:899–908.
- Bowden, Charles. 1998. We are hit. *Esquire* (April): 56.

- Box, G.E.P., and G.M. Jenkins. 1970. *Time series analysis: Forecasting and control*. San Francisco: Holden-Day.
- Bratton, W.J., with P. Knobler. 1998. *Turnaround: How America's top cop reversed the crime epidemic*. New York: Random House.
- Breiman, L., J.H. Friedman, R.A. Olshen, and C.I. Stone. 1984. *Classification and regression trees*. Belmont, California: Wadsworth Publishing Company.
- Brent, E.E., Jr., and R.E. Anderson. 1990. *Computer applications in the social sciences*. New York: McGraw-Hill.
- Brimelow, P. 1995. *Alien nation: Common sense about America's immigration disaster*. New York: Random House.
- Brown, D.L., G.V. Fuguitt, T.B. Heaton, and S. Waseem. 1997. Continuities in size of place preference in the United States, 1972–1992. *Rural Sociology* 62:408–428.
- Bufford, Bill. 1991. *Among the thugs*. New York: Vintage Books.
- Butcher, K.F., and D. Card. 1991. Immigration and wages: Evidence from the 1980s. *American Economic Review* 81:292–296.
- Butler, O. 1993. *Parable of the sower*. New York: Time Warner.
- Camarota, S.P. 1998. Does immigration harm the poor? *Public Interest* (Fall): 23–32.
- Carpenter, G.A., and S. Grossberg. 1991. *Pattern recognition by self-organizing neural networks*. Cambridge: MIT Press.
- Castells, M. 1991. *The informational city: Information technology, economic restructuring, and the urban-regional process*. New York: Blackwell.
- Center for Immigration Studies. 1998. Study finds that immigration reduces the wages of natives employed in the low-skilled sectors of the economy. Retrieved 2 July 1999 from the World Wide Web: <http://www.fairus.org/09115801.htm>.
- Chin, Ko-lin. 1996. *Chinatown gangs: Extortion, enterprise, and ethnicity*. New York: Oxford University Press.
- Cloward, Richard A., and Lloyd E. Ohlin. 1960. *Delinquency and opportunity*. New York: Free Press.
- Cohen, Albert K. 1955. *Delinquent boys*. Glencoe, Illinois: Free Press.
- Cohen, Albert K., and James F. Short, Jr. 1958. Research in delinquent subcultures. *Journal of Social Issues* 24 (3): 20–37.

- Coleman, James S., Robert H. Bremner, Burton R. Clark, John B. Davis, Dorothy H. Eichorn, Zvi Griliches, Joseph F. Kett, Norman B. Ryder, Zahava Blum Doering, and John M. Mays. 1974. *Youth: Transition to adulthood*. Report of the Panel of the President's Science Advisory Committee. Chicago: University of Chicago Press.
- Cook, P., and J. Ludwig. 1995. *Guns in America*. Washington, D.C.: Police Foundation.
- Cronk, C.E., and P.D. Sarvela. 1997. Alcohol, tobacco, and other drug use among rural/small town and urban youth: A secondary analysis of the Monitoring the Future data set. *American Journal of Public Health* 87:760-766.
- Cummings, Scott. 1993. Anatomy of a wilding gang. In *Gangs: The origin and impact of contemporary youth gangs in the United States*, edited by S. Cummings and D. Monti. Albany: State University of New York Press.
- Curry, G. David, Richard A. Ball, and Scott H. Decker. 1996. Estimating the national scope of gang crime from law enforcement data. In *Gangs in America*. 2d ed. Edited by C.R. Huff. Thousand Oaks, California: Sage Publications.
- Decker, Scott H., and Janet L. Lauritsen. 1996. Breaking the bonds of membership: leaving the gang. In *Gangs in America*. 2d ed. Edited by C.R. Huff. Thousand Oaks, California: Sage Publications.
- Decker, S., and S. Pennell. 1995. *Arrestees and guns: Monitoring the illegal firearms market*. Research Preview, NCJ 153850. Washington, D.C.: U.S. Department of Justice, National Institute of Justice.
- Dees, M. 1996. *Gathering storm: America's militia threat*. New York: HarperCollins Publishers.
- DiIulio, J.J. 1995. Crime solutions. *American Enterprise* (May): 3-25.
- Dodson, Dan W. 1962. Frederic Milton Thrasher (1892-1962). *American Sociological Review* 27:580-581.
- Donato, K.M., J. Durand, and D.S. Massey. 1992. Stemming the tide? Assessing the deterrent effects of the Immigration Reform and Control Act. *Demography* 29:139-157.
- Donohue, J.J. 1998. Understanding the time path of crime. *Journal of Criminal Law and Criminology* 88:1423-1451.
- Fagan, Jeffrey. 1996. Gangs, drugs, and community change. In *Gangs in America*. 2d ed. Edited by C.R. Huff. Thousand Oaks, California: Sage Publications.
- Fagan, Jeffrey, and Deanna L. Wilkinson. 1998. Guns, youth violence, and social identity in inner cities. In *Youth violence*, edited by M. Tonry and M. Moore. Vol. 24 of *Crime and justice: A review of research*. Chicago: University of Chicago Press.

- Fagan, J., F.E. Zimring, and J. Kim. 1998. Declining homicide in New York City: A tale of two trends. *Journal of Criminal Law and Criminology* 88:1277–1323.
- Flango, V., and M.E. Elsner. 1983. Estimating caseloads: Two methods tested in Tulsa. *State Court Journal* (Spring): 18–24.
- Fox, James A. 1996. Trends in juvenile violence: A report to the United States Attorney General on current and future rates of juvenile offending. Executive Summary. U.S. Department of Justice, Bureau of Justice Statistics. Retrieved 14 October 1999 from the World Wide Web: <http://www.ojp.usdoj.gov/bjs/abstract/TVjfox.htm>.
- Fulton, J.A., G.V. Fuguitt, and R.M. Gibson. 1997. Recent changes in metropolitan-nonmetropolitan migration streams. *Rural Sociology* 62:363–384.
- Goldwater, Barry. 1964. *Where I stand*. New York: McGraw-Hill.
- Gottfredson, Michael, and Travis Hirschi. 1990. *A general theory of crime*. Stanford, California: Stanford University Press.
- Gottfredson, S.D., and R.B. Taylor. 1988. Community contexts and criminal offenders. In *Crime and community context*, edited by T. Hope and M. Shaw. London: HMSO.
- Granger, C.W.J. 1980. *Forecasting in business and economics*. New York: Academic Press.
- Greenberg, David F., ed. 1981. *Crime and capitalism*. Palo Alto, California: Mayfield.
- Gurr, Ted Robert. 1981. Historical trends in violent crimes: A critical review of the evidence. In *Crime and justice: An annual review of research*, edited by M. Tonry and N. Morris. Vol. 3. Chicago: University of Chicago Press.
- Gusfield, Joseph R. 1963. *Symbolic crusade*. Urbana: University of Illinois Press.
- Hagedorn, John M. 1998. Gang violence in the postindustrial era. In *Youth violence*, edited by M. Tonry and M. Moore. Vol. 24 of *Crime and justice: A review of research*. Chicago: University of Chicago Press.
- . 1988. *People and folks: Gangs, crime, and the underclass in a Rustbelt city*. Chicago: Lake View Press.
- Harries, K.D. 1980. *Crime and the environment*. Springfield, Illinois: Charles C. Thomas.
- Hartigan, J.A. 1972. Direct clustering of a data matrix. *Journal of the American Statistical Association* 67:123–129.
- Hindelang, Michael J., Travis Hirschi, and Joseph G. Weis. 1981. *Measuring delinquency*. Beverly Hills: Sage Publications.

- Hobsbawm, Eric. 1994. *The age of extremes: A history of the world, 1914–1991*. New York: Pantheon Books.
- Johnson, Eric, and Eric Monkkonen, eds. 1996. *The civilization of crime: Violence in town and country since the Middle Ages*. Urbana: University of Illinois Press.
- Jones, P.R. 1990. Community corrections in Kansas: Extending community-based corrections or widening the net? *Journal of Research in Crime and Delinquency* 27:79–101.
- Kates, D., and G. Kleck. 1997. *The great American gun debate*. San Francisco: Pacific Research Institute for Public Policy.
- Kerner Commission. 1968. *Report on the National Advisory Commission on Civil Disorders*. Washington, D.C.: U.S. Government Printing Office.
- Klein, Malcolm. 1995. *The American street gang*. New York: Oxford University Press.
- LaFree, Gary. 1998a. *Losing legitimacy: Street crime and the decline of social institutions in America*. Boulder, Colorado: Westview Press.
- . 1998b. Social institutions and the crime “bust” of the 1990s. *Journal of Criminal Law and Criminology* 88:1325–1368.
- LaLonde, R J., and R.H. Topel. 1991. Immigrants in the American labor market: Quality, assimilation, and distributional effects. *American Economic Review* 81:297–302.
- Lamm, R.D., and G. Imhoff. 1985. *The immigration time bomb: The fragmenting of America*. New York: Dutton.
- Lane, R. 1997. *Murder in America*. Columbus: Ohio State University Press.
- Lauritsen, J.L. 1998. The age-crime debate: Assessing the limits of longitudinal self-report data. *Social Forces* 77:127–155.
- Leiterman, H L., and J.P. Ryan. 1999. Immigration: A dialogue on policy, law, and values. *Focus on Law Studies* 14 (2): 1–16.
- Lieberson, Stanley. 1985. *Making it count: The improvement of social research and theory*. Berkeley: University of California Press.
- Loftin, C., M. Heumann, and D. McDowall. 1983. Mandatory sentencing and firearms violence: Evaluating an alternative to gun control. *Law & Society Review* 17:288–317.
- Logan, J., and S. Messner. 1987. Racial residential segregation and suburban violent crime. *Social Science Quarterly* 68:510–527.
- MacLeod, Jay. 1987. *Ain't no makin' it: Leveled aspirations in a low-income neighborhood*. Boulder, Colorado: Westview Press.

- Maguire, K., and A.L. Pastore, eds. 1998. *Sourcebook of criminal justice statistics, 1997*. NCJ 171147. Washington, D.C.: U.S. Department of Justice, Bureau of Justice Statistics.
- Massey, D.S. 1995. The new immigration and ethnicity in the United States. *Population and Development Review* 21:631–652.
- Massey, D., and N. Denton. 1988. Suburbanization and segregation in U.S. metropolitan areas. *American Journal of Sociology* 94:592–626.
- Massey, D.S., A.B. Gross, and K. Shibuya. 1994. Migration, segregation, and the geographic concentration of poverty. *American Sociological Review* 59:425–445.
- Merton, Robert K. 1938. Social structure and anomie. *American Sociological Review* 3:672–682.
- Miethe, Terrence D., and Richard C. McCorkle. 1997. Gang membership and criminal processing: A test of the “master status” concept. *Justice Quarterly* 14:407–428.
- Miller, Walter B. 1958. Lower class culture as a generating milieu of gang delinquency. *Journal of Social Issues* 24:5–19.
- Moore, John P., and Craig P. Terrett. 1999. *Highlights of the 1997 National Youth Gang Survey*. Fact Sheet, NCJ 175559. Washington, D.C.: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention.
- Morris, Albert. 1975. A history, 1941–1974. *Criminology* 13:123–166.
- National Public Radio. 1999a. *All Things Considered*. 6 July.
- . 1999b. *Morning Edition*, 21 June.
- National Youth Gang Center. 1998. *1996 National Youth Gang Survey*. Paper prepared for the Institute for Intergovernmental Research, Tallahassee, Florida.
- Nettler, Gwynn. 1984. *Explaining crime*. 3d ed. New York: McGraw-Hill.
- O’Brien, S.P., and D.P. Haider-Markel. 1998. Fueling the fire: Social and political correlations of citizen militia activity. *Social Science Quarterly* 79:456–465.
- Olligschlaeger, A.M. 1997. Artificial neural networks and crime mapping. In *Crime mapping and crime prevention*, edited by D. Weisburd and T. McEwen. Monsey, New York: Criminal Justice Press.
- Ostapovich, J. 1999. Two Amish men sentenced for dealing cocaine. Retrieved 30 June 1999 from the World Wide Web: <http://www2.kyw1060.com>.
- Padilla, Felix. 1993. The working gang. In *Gangs: The origins and impact of contemporary youth gangs in the United States*, edited by S. Cummings and D. Monti. Albany: State University of New York Press.

- Pinderhughes, Howard. 1993. "Down with the program": Racial attitudes and group violence among youth in Bensonhurst and Gravesend. In *Gangs: The origins and impact of contemporary youth gangs in the United States*, edited by S. Cummings and D. Monti. Albany: State University of New York Press.
- Ploscowe, Morris. 1931. Some causative factors in criminality. In *Report on the Causes of Crime*. National Commission on Law Observance and Enforcement Report 13, vol. 1. Washington, D.C.: U.S. Government Printing Office.
- Polsby, D.D., and D.B. Kates. 1998. Causes and correlates of lethal violence in America. *University of Colorado Law Review* 69:969–987.
- Portes, A., and R.D. Manning. 1986. The immigrant enclave: Theory and empirical examples. In *Competitive ethnic relations*, edited by S. Olzak and J. Nagel. Orlando: Academic Press.
- President's Commission on Law Enforcement and Administration of Justice. 1967. *The challenge of crime in a free society*. Washington, D.C.: U.S. Government Printing Office.
- Rose, D.A., and T.R. Clear. 1998. Incarceration, social capital, and crime: Implications for social disorganization theory. *Criminology* 36:441–479.
- Roth, J.A., and C.S. Koper. 1999. *Impacts of the 1994 assault weapons ban: 1994–96*. Research in Brief, NCJ 173405. Washington, D.C.: U.S. Department of Justice, National Institute of Justice.
- Ruth, Henry S., Jr., Lloyd Ohlin, Irving Lang, Frank J. Remington, Norman Abrams, Eliot H. Lumbard, and Dean Joseph O'Meara. 1971. *The challenge of crime in a free society: Perceptions on the report of the President's Commission on Law Enforcement and Administration of Justice*. New York: Da Capo Press.
- Sampson, R.J. 1987. Urban black violence: The effect of male joblessness and family disruption. *American Journal of Sociology* 93:348–382.
- Sampson, R.J., and T.C. Castellano. 1982. Economic inequality and personal victimization. *British Journal of Criminology* 22:363–385.
- Sanders, William. 1994. *Gangbangs and drive-bys: Grounded culture and juvenile gang violence*. New York: Aldine de Gruyter.
- Sassen, S. 1991. *The global city: New York, London, Tokyo*. Princeton, New Jersey: Princeton University Press.
- Schwartz, Gary. 1987. *Beyond conformity or rebellion: Youth and authority in America*. Chicago: University of Chicago Press.
- Schwendinger, Herman, and J. Schwendinger. 1985. *Adolescent subcultures and delinquency*. New York: Praeger.

Shaw, Clifford R. 1936. *Brothers in crime*. Chicago: University of Chicago Press.

———. 1930. *The jack-roller: A delinquent boy's own story*. Chicago: University of Chicago Press.

Shaw, Clifford R., and Henry D. McKay. [1942] 1969. *Juvenile delinquency and urban areas*. Rev. ed. Chicago: University of Chicago Press.

———. 1931. *Report on the causes of crime*. National Commission on Law Observance and Enforcement Report no. 13, vol. 2. Washington, D.C.: U.S. Government Printing Office.

Shaw, Clifford R., and Maurice E. Moore. 1931. *The natural history of a delinquent career*. Chicago: University of Chicago Press.

Shaw, Clifford R., Frederick Zorbaugh, Henry D. McKay, and Leonard S. Cottrell. 1929. *Delinquency areas*. Chicago: University of Chicago Press.

Short, James F., Jr. 1997. *Poverty, ethnicity, and violent crime*. Boulder, Colorado: Westview Press.

———. 1963. Introduction to the abridged edition. In *The gang: A study of 1,313 gangs in Chicago*, by Frederic M. Thrasher. Chicago: University of Chicago Press.

Short, James F., Jr., and Fred L. Strodbeck. 1965. *Group process and gang delinquency*. Chicago: University of Chicago Press.

Slovic, P. 1978. The psychology of protective behavior. *Journal of Safety Research* 10:58–68.

Southern Poverty Law Center. 1999. Intelligence project: The year in hate. Retrieved 6 July 1999 from the World Wide Web: <http://www.splcenter.org/intelligenceproject>.

Spergel, Irving A. 1995. *The youth gang problem: A community approach*. New York: Oxford University Press.

Stephens, G. 1995. Crime in cyberspace. *Futurist* 29:24–31.

Stephenson, N. 1993. *Snow crash*. New York: Bantam.

Sullivan, Mercer. 1989. *"Getting paid": Youth crime and work in the inner city*. Ithaca, New York: Cornell University Press.

Suro, R. 1998. *Strangers among us: How Latino immigration is transforming America*. New York: Alfred A. Knopf.

Swanson, N.R., and H. White. 1997. Forecasting economic time series using flexible versus fixed specification and linear versus nonlinear econometric models. *International Journal of Forecasting* 13:439–461.

- Taylor, R.B. 1994. *Research methods in criminal justice*. New York: McGraw-Hill.
- Thrasher, Frederic. 1927. *The gang: A study of 1,313 gangs in Chicago*. Chicago: University of Chicago Press.
- Tittle, Charles R. 1995. *Control balance: Toward a general theory of deviance*. Boulder, Colorado: Westview Press.
- Tonry, M., L.E. Ohlin, and D.P. Farrington. 1991. *Human development and criminal behavior*. New York: Springer-Verlag.
- U.S. Bureau of the Census. 1996. *Government finances, 1984–1992*. Series GF/92–5. Washington, D.C.
- . 1985. *Historical statistics on governmental finance and employment*. Washington, D.C.
- Vernick, J.S., and S.P. Teret. 1993. Firearms and health: The right to be armed with accurate information about the second amendment. *American Journal of Public Health* 83:1773–1777.
- Vigil, James Diego. 1988. *Barrio gangs*. Austin: University of Texas Press.
- Wacquant, L.J.D., and W.J. Wilson. 1989. The cost of racial and class exclusion in the inner city. *Annals of the American Academy of Political and Social Science* 105:8–25.
- Walsh, S. 1999. Exporters of guns flock to U.S. *Washington Post*, 28 June.
- Wickersham Commission. 1931a. *Report on the causes of crime*. National Commission on Law Observance and Enforcement Report no. 13, vol. 1. Washington, D.C.: U.S. Government Printing Office.
- . 1931b. *Report on the enforcement of the prohibition laws of the United States*. National Commission on Law Observance and Enforcement Report no. 2. Washington, D.C.: U.S. Government Printing Office.
- . 1931c. *Report on lawlessness in law enforcement*. National Commission on Law Observance and Enforcement Report no. 11. Washington, D.C.: U.S. Government Printing Office.
- . 1931d. *Report on police*. National Commission on Law Observance and Enforcement Report no. 14. Washington, D.C.: U.S. Government Printing Office.
- Williams, Terry. 1989. *The cocaine kids: The inside story of a teenage drug ring*. Menlo Park, California: Addison Wesley Longman.
- Wilson, W.J. 1996. *When work disappears: The world of the new urban poor*. New York: Alfred A. Knopf.

———. 1991. Studying inner-city dislocations: The challenge of public agenda research. *American Sociological Review* 56:1–14.

———. 1987. *The truly disadvantaged*. Chicago: University of Chicago Press.

Winch, P. 1958. *The idea of a social science and its relation to philosophy*. London: Routledge & Kegan Paul.

Wintemute, G. 1998. *Predicting criminal behavior among authorized purchasers of handguns*. Research in Progress Preview, FS 000198. Washington, D.C.: U.S. Department of Justice, National Institute of Justice, and U.S. Department of Health and Human Services, Centers for Disease Control and Prevention.

Young, Kimball. 1931. Frederic M. Thrasher's study of gangs, analysis 37. In *Methods in social science: A case book*, edited by S. Rice. Chicago: University of Chicago Press.

Zahn, Margaret A. 1999. Thoughts on the future of criminology—The American Society of Criminology 1998 presidential address. *Criminology* 37:1–15

Zawitz, M. 1995. *Guns used in crime*. Selected Findings, NCJ 148201. Washington D.C.: U.S. Department of Justice, Bureau of Justice Statistics.

Zimring, F.E. 1998. The youth violence epidemic: Myth or reality? *Wake Forest Law Review* 33:727–744.

———. 1996. Spurious predictions of a coming horde of teenage superpredators. *Philadelphia Inquirer*, 13 September.

Theoretical Developments in Criminology

by Charles R. Tittle

Twentieth-century theoretical developments in four categories are reviewed: theories of individual differences in offending, theories of variation in offending through the lifecycle, theories of diversity of crime rates among social entities, and theories of differences among social situations in criminal outcomes. The essay notes temporal changes and shows integrative trends and cross-fertilization. It concludes that criminological theorists have made large strides, particularly in the past two decades, and as a result are now able to broadly outline the causes of crime-relevant phenomena. However, much work remains, particularly in more effectively articulating theories for precise explanations and predictions. Favorable trends suggesting continued improvement are identified.

Charles R. Tittle is Professor of Sociology at Washington State University.



One reason for studying crime-relevant phenomena is to answer questions of “why?” and “how?” about them. Providing those answers is the job of theory. This essay traces theoretical developments in this century, particularly the last few decades. Two points are emphasized: First, theories have become increasingly sophisticated, mainly by merging insights from preexisting formulations; second, still more development is needed. Four categories, demarcated by the main phenomena the theories are trying to explain, are discussed:

- Differences in criminal behavior among individuals.
- Differences in crime at different times in the lifecycle.
- Differences in crime rates among societies, cities, communities, neighborhoods, or other sociopolitical units.
- Differences among social situations in criminal outcomes.

Some theories explain two or more categories simultaneously, but they are discussed within the categories reflecting their main focuses. Theories explaining how and why some acts are illegal, why there is differential enforcement of law, why there are differences in offending between males and females, and theories about numerous other phenomena are not discussed. Although such theories are important, this review is necessarily selective, not only in the categories addressed but also in the specific theories noted within each category. It would be impractical to try to describe all the theories in criminology. I review the main efforts to explain variations in crime-relevant phenomena, taking for granted the definitions of crime in any given society.

Any intellectual account can be regarded as a theory. However, efforts range from simple one-statement principles focused on specific events or phenomena to elaborate, intricately interwoven explanatory systems applying to wide ranges of different phenomena. Furthermore, the adequacy of theories can be evaluated in many ways. Some regard a good theory as one that can be mathematically expressed; others think of good theories as those that provoke challenge and criticism. Some evaluate theories by the number of predictions that can be made from them; others believe that identification of an important variable or demarcation of some aspects of things to be explained represents good theory. And still others assess theories according to principles of “integration.” How one evaluates theories influences whether the theoretical enterprise is judged as more or less adequate. Since the criteria are somewhat arbitrary, there are great disagreements about which theories are the best or the most important. This essay only notes temporal changes, shows integrative trends,

and suggests that further improvements could be accomplished by incorporating more elements from competing theories.

Theories To Explain Differences in Offending Among Individuals

The most intense theoretical efforts have focused on individual variations. Those theories can be classified by their dominant themes, although few theories can be regarded as completely limited to the theme they emphasize. The various themes appear to reflect prevailing modes of thought in academe and the larger society at the time the theories featuring them were first enunciated. Yet articulations have evolved beyond the intellectual contexts out of which the themes emerged, and some theories within each of the themes now incorporate elements from other themes.

Criminal behavior has been attributed to personal defects—either physical or psychic. Deficiencies have been traced to genetic inheritance, to such damaging influences as premature birth or environmental poisoning, and to life experiences that distort psychic or social development.

The themes of individual-level theories

Six major themes in theories of individual differences in criminal behavior have emerged:

- Personal defects.
- Learning.
- Strain/deprivation.
- Identity.
- Rational choice.
- Control/integration.

Each promotes a fundamental idea, or causal process, that is plausible and empirically viable, at least given the limited bounds within which it has been tested. And each of the themes has shown steady evolution and improvement.

Personal defects

The earliest theme was dominant until the late 1930s. Beginning with Lombroso (1878), but also encompassing psychoanalysis (for example, Abrahamsen 1944; Aichhorn [1925] 1968) and other psychological arguments (for example, Eysenck and Gudjonsson 1989; Wilson and Herrnstein 1985), criminal behavior has been attributed to personal defects—either physical or psychic. Deficiencies have been traced to genetic inheritance (for example, Mednick and Kandel 1988; Raine 1993), to such damaging influences as premature birth or environmental poisoning (for example, Kandel and Mednick 1991; Moffitt 1990), and to life experiences that distort psychic or social development (Kendall-Tackett, Williams, and Finkelhor 1993; Smith and Thornberry 1995; Widom 1989; but see Zingraff et al. 1993).

Although this theme has faded in prominence, it has remained alive, particularly among psychologists, and recently has regained some of its earlier influence. Most criminologists now recognize that personal defects are important, though most assume that deficiencies, rather than being primary causes, interact in some way with influences identified in other explanatory themes (Cullen et al. 1997). Articulations, however, have not yet incorporated the full range of such interactions. Scholars have isolated one or another deficit that sometimes comes into play for some offenses or some offenders (for example, Caspi et al. 1994; Moffitt, Lynam, and Silva 1994). Yet there is no coherent synthesis of forces underlying such factors.

Modern theories featuring personal defects usually contend that pathology alone is not enough to produce crime, and they attempt to spell out how personal defects come about and get translated into criminal outcomes, often incorporating insights from a variety of other themes. These features can be seen most clearly in Moffitt's (1993) two-path theory.

The theory identifies two causal paths to misbehavior. One characterizes the "lifecourse persistent" offender, who is already antisocial at an early age and continues so throughout life. The second is exemplified by the "adolescence limited" offender, who does not start offending until mid- or late adolescence, and typically stops in early adulthood. Careers of the two types of offenders, therefore, differ greatly.

Moffitt proposes distinct, but linked, explanations for each pattern. The various neuropsychological deficits of the persistent offender, many present at birth, hamper development. These children are so difficult to manage that their parents are frequently unable to cope. A behaviorally difficult child with an overwhelmed or deficient parent often ends up poorly socialized (Nagin and

Paternoster 1994; Simons et al. 1998). With inadequate skills and weak self-control, the child has additional difficulty in school. Hence, those with early behavior problems fail to acquire personal and social capital that might help them adjust conventionally later in life. As a result, problem children, who make up a relatively small proportion of any birth cohort, grow into rebellious teenagers, eventually becoming deviant, antisocial adults.

The much more prevalent adolescence-limited offenders usually exhibit few early conduct problems, and so are effectively socialized. When these generally “normal” youths enter adolescence, however, they begin to suffer a maturity gap because the adult roles they wish to occupy are inconsistent with their adolescent status. At the same time, they come into greater contact with, and are inspired to imitate, the lifecourse-persistent offenders. The maturity gap and consequent desire to act adultlike motivates the adolescence-limited offender to mimic the misbehavior of lifecourse-persistent offenders who are behaving rebelliously.

Since persistent offenders are already illegitimately enjoying the rewards of maturity, such as recreational drugs, sex, and autonomy, they “assume social influence over youths who admire and emulate them during adolescence” (Moffitt 1993, 687). Consequently, a majority of youths try deviance (sometimes involving crime) that allows them symbolically to claim maturity. Eventually, the experimenters realize that the costs of adolescent deviance can be high, and they also begin to acquire adult statuses that legitimately provide the rewards of maturity acquired only illegitimately while they were adolescents. For most of them, misbehavior then ceases.

As a culmination of personal defect theorizing, Moffitt’s formulation goes much further than most previous efforts. She ties personal defects to other processes, drawing on notions about learning and social control as well as on cultural patterns of age change. Her theory does not, however, pull in as many potential causal factors as it might. The theory could probably be made even more effective by incorporating causal processes from theories of strain and identity, for example, and it might explain how the processes she identifies are conditioned by community and situational circumstances.

Learning

Explaining crime as a product of learning emerged to counter simplistic statements about personal defects that dominated thinking in the early part of this century. Since then, numerous thinkers (for example, Akers 1985; Conger and Simons 1997) have accounted for criminal behavior as an expression of internalized criminogenic values, attitudes, skills, and normative standards. Some

The reinforcement values of different acts and reactions may depend on concepts of equity and justice as well as on the actual distribution of rewards and costs within a given social environment.

theorize that learning results from conditioning, or reinforcement, and others see it stemming from repetitive instruction or from imitation, often of cultural elements to which an individual is more or less exclusively exposed. There are also notions about what, among the things people might learn, is most relevant to criminal behavior. Some focus heavily on criminogenic messages, particularly observation of criminal behavior (Sutherland 1924; Wilson and Herrnstein 1985); others emphasize cultural standards that predispose people to act criminally under specific conditions (for example, Miller 1958; Anderson 1999; Luckenbill and Doyle 1989); a few identify linguistic or other mechanisms that come into play to help produce criminal outcomes under various condi-

tions (Sykes and Matza 1957; Matza 1964); and still others emphasize the extent to which personal traits that predispose one to crime, such as weak self-control or aggressiveness, are learned (Gottfredson and Hirschi 1990). Furthermore, some learning arguments give priority to everyday interpersonal, family, neighborhood, or school influences (Akers 1985; Anderson 1999; Andrews and Bonta 1994; Bandura 1977; Conger and Simons 1997); others emphasize subcultural contexts (Miller 1958; Wolfgang and Ferracuti 1967); and a few focus on large-scale cultural milieux (Gastil 1971; Hagan et al. 1998; Matza and Sykes 1964). Finally, arguments differ in their attention to conditions, such as opportunity and social expectations, that might activate behaviors consistent with learned traits.

No single learning formulation pulls together the various strands noted above. In fact, most theories based on learning principles focus mainly on how learning occurs, neglecting the conditions that provide inputs to the learning process as well as those that activate learned responses. Despite this, there has probably been more continuity in the learning theme than any other theme. This continuity has unfolded mainly around a central causal process of reinforcement/conditioning.

Several lines of theory—utilitarian/deterrence, behavioral psychological accounts, rational choice, and social learning—share the basic premise that people are always striving to maximize benefits and rewards, while minimizing costs or problems. In learning theories, however, when an action produces more reward than cost, it is repeated and is thereby said to have been reinforced. Through repetition and continuous reinforcement, patterns of behaviors become fixed and predictable. And sometimes when reinforcements are paired with verbal or other kinds of stimuli, certain attitudes, skills, and values are also learned so that they then activate the behaviors connected with them. Such theories

suggest that to explain and predict criminal behavior, one has only to understand the pattern and extent of reinforcement to which a person has been exposed. But understanding reinforcement histories requires knowing the things that gratify or cause pain for an individual in various contexts.

Various scholars have added to this general formulation. Sutherland (1924) did not use principles of reinforcement, but Burgess and Akers (1966) showed that his scheme could be expressed that way. Glaser (1978, 126), tried to show why various things have reinforcement value, concluding that “anticipations” about criminal behavior are determined by some combination of a person’s social bonds, differential learning, and perceived opportunities. Still later, Akers (1985) brought modeling and vicarious reinforcement (see Bandura 1969, 1977) into the criminal learning scheme. Wilson and Herrnstein (1985) noted that learning may be linked to genetically determined factors or to biological processes. They contend that personality traits, such as impulsivity, cause some people to discount potential negative consequences. Moreover, the reinforcement values of different acts and reactions may depend on concepts of equity and justice as well as on the actual distribution of rewards and costs within a given social environment. Finally, they recognize that a reinforcer may be powerful or weak, depending on how many other reinforcers are at work.

Still more conditions were added by Pearson and Weiner (1985), who identified elements in the deviance process and showed how each element connected with reinforcement/conditioning. In addition, they theorized that social structure determines the production and distribution of many of the components incorporated in the reinforcement/learning scheme. Since individual factors influence how structural variables are interpreted, Pearson and Weiner depict actual behavior as a complicated interaction between individual and structural conditions playing on various elements in the deviance process. Yet, they do not articulate how these elements mesh to produce specific outcomes under particular conditions.

Conger and Simons (1997) recently used the “matching principle” to show how learning can account for time spent in various contexts and how counter-reinforcement can overcome negative inputs, all in response to different contingencies associated with different stages in the lifecycle.

The general plausibility of the conditioning/reinforcement argument has been empirically established (including Akers 1985; Bandura 1969), and it stands as a clear example of development. It spells out how learning occurs, and it links external conditions, some structural and some situational, to internal outcomes—which, in turn, are reflected in behavioral responses. Developments have been exceptionally integrative because reinforcement can stem from many sources, and the theory potentially explains all criminal (and other) behavior by

channeling causal forces through the learning filter. Despite this, theorists have not incorporated as many additional elements as they could. Personal defects that might inhibit learning are conspicuously scarce, as are notions about strain and social control, which may sometimes enhance learning and sometimes inhibit it, and about community disorganization, which could produce ineffective teaching. Moreover, learning theory now consists of a plethora of segments emphasized by different scholars. Fitting all of the pieces together into a full, coherent statement remains to be done.

The integrative trend of learning theories is reflected in adoption of their principles by theorists not directly concerned with learning. Whether encompassed in the reinforcement formulation or not, learning has found its way into most attempts to build theory. For example, even Merton's (1938, 1957) anomie formulation, which emphasizes strain stemming from societal-level disjunctures between culturally encouraged goals and available means to achieve those goals, presupposes that people learn cultural expectations for success and that their specific adaptations to discrepancies between goals and means are, to some extent, influenced by what they have learned.

Strain/deprivation

The strain/deprivation theme is very old (Bonger 1916), but it attained particular prominence during the 1940s and 1950s and has recently gained renewed vigor with reformulation and expansion (Adler and Laufer 1995; Agnew 1992, 1999; Messner and Rosenfeld 1997). Applied to individuals, it concerns the effect of troublesome, depriving, or straining events or circumstances. When problems such as social failure, loss of positively valued things, abuse, or extreme poverty (Agnew 1992, 1999; Merton 1938, 1957) fall on individuals, theoretically they seek relief or boil with rage (for example, Baron and Hartnagel 1997; Bernard 1990). Criminal behavior is one vehicle for relieving such distress or for venting the emotion associated with it.

Theorists have identified conditions that potentially produce strain for various people, as well as the most important contexts for strain production, and they have explained when and why strain or deprivation leads to crime. Focuses include strain and emotional deprivation in interpersonal relations (Broidy and Agnew 1997; Matsueda and Heimer 1997); stress produced by cultural and social expectations (Greenberg 1981a, 1981b; Merton 1938, 1957); strain from failure or loss (Agnew 1992); strain stemming from control and regulation (Brehm and Brehm 1981; Tittle 1995); and strain from material, social, or psychological deprivation (Bernard 1990; Kovandic, Vieraitis, and Yeisley 1998). Furthermore, some see immediate contexts as primary (Cohen 1955), while others focus on larger milieu (Merton 1938, 1957; Messner and Rosenfeld [1994] 1997; Short forthcoming).

Theorists have not made it clear whether strain predisposes one to criminal behavior that must be brought forth by peculiar activators or whether it directly generates illegal conduct. Moreover, strain hypotheses have mixed empirical support (see Agnew 1997; Clinard 1964; Fowles and Merva 1996). An association between some kinds of deprivation and crime appears to be well established (Hagan 1997; Short 1997), however, and partly because of that, this theme has been especially popular among activists. Critical, radical, feminist, and humanistic thinkers have identified many conditions that are regarded as unjust, depriving, and productive of criminal behavior. They include capitalism, unequal distributions of wealth, absolute poverty, patriarchy, hierarchies of power, racism, sexism, parental neglect or abuse, unemployment, and absence of love. Theories, however, have not fully shown how, why, and under what conditions those depriving conditions cause or contribute to crime.

The most complete and best articulated strain/deprivation theory is that formulated by Agnew (1992, 1997, 1999). He expands previous thinking, first by identifying numerous sources of strain. In addition to the structural inconsistencies discussed by Merton (1938, 1957), strain-generating conditions include negative relations with others. These negative relations may arise when one person has blocked another person's goals, has endangered things that are valued, or is responsible for stimuli that are noxious to the individual. Strain can also result from unpleasant physical conditions, personal or environmental. All of these different kinds of strain can stimulate negative emotions, such as anger, depression, or anxiety, that then must be managed in either conventional or deviant ways.

Agnew's account assumes that strained individuals want to alleviate the strain or transcend the emotions it causes. Criminal behavior may do that, but it is not the only option. Of three ways to cope—cognitive, emotional, and behavioral—only the last one involves the possibility of crime. In cognitive coping, the person mentally adjusts to reinterpret the straining inputs. In emotional coping, the person relieves the discomfort stemming from the strain or the feelings it produces. In behavioral coping, one actually tries to get rid of the straining element or tries to adapt to it. Almost everybody, most of the time, copes with strain or negative emotion by noncriminal means. Under some conditions, however, coping takes the form of criminal behavior.

General strain theory attempts to identify the conditions that can lead from strain to crime. One such category involves aspects of the strain itself: its magnitude, how recently it began, how long it has lasted, and the extent to which different straining stimuli converge. But the theory also emphasizes accumulation of unresolved strains, as well as the relative balance of positive and negative factors in one's life.

Conditions affecting the kind of coping employed by a strained person help determine criminal or noncriminal outcomes. Styles of coping reflect personality, learning history, and other characteristics of individuals, as well as the kind of social support available. The specific form that coping takes in particular circumstances depends partly on how constrained or costly deviant coping is and partly on the cultural or social encouragements for deviant coping, particularly from peers.

Because so many things can affect strain, the theory has been extraordinarily integrative. Moreover, the strain theme is woven into many theories not directly focused on strain, though it is less pervasive than the learning theme. For example, theories about personal defects often suggest that individual deficiencies come into play mainly under stressful circumstances (Raine 1993). Labeling arguments portray crises of self as stimuli for identity change (Gove 1980; Payne 1973). And even learning theories—especially subcultural ones (Cohen 1955; Miller 1958)—often see behavioral responses, which eventually come to be shared and passed on to those in similar circumstances, as reactions to strain. Since strain theories overlap with other theories, it is reasonable to imagine that all would benefit from explicit integration.

Identity

A fourth motif in explaining individual differences in crime concerns formation, maintenance, and change in personal identities. Though rooted in symbolic interactionism, which emerged much earlier, this theme was particularly prominent in the 1960s and 1970s, mainly because of the popularity of “labeling” (see Gove 1980). That theory actually consists of two parts, one concerning rule enforcement and the other concerning reactions to having been the object of social control efforts. Perhaps labeling theory is best known for suggesting that deviance is problematic and negotiable and for its contention, shared with conflict theory, that those lacking power and resources are more likely to be officially processed and stigmatized. Nevertheless, it stimulated much thinking about the consequences for individuals of having been legally processed, and one of those consequences bears on identities. Later, as unfavorable responses accumulated (for example, Gibbs 1966; Wellford 1975), labeling theory declined in influence, along with the identity theme in general. Nevertheless, interest in a self-deviance linkage continues (Jang and Thornberry 1998; Matsueda 1992; Paternoster and Iovanni 1989), and although labeling is still the best known version of the identity theme, modern formulations of that theme are more intricate and sophisticated (Matsueda 1992).

All such theories explain criminal behavior as a consequence of the search for meaningful self-concepts. Crime sometimes reflects poor self-esteem, and sometimes it is a maneuver to overcome negative self-attitudes (for example, Kaplan 1975, 1980; Rosenberg and Rosenberg 1978). In addition, criminal behavior has been interpreted as a way to claim and sustain a prestigious identity (Katz 1988), or as an adaptation to a stigmatized identity (Becker 1963; Lofland 1969). Yet, the self is portrayed as dependent on reactions and appraisals from others, and workable self-concepts are said to be crucial for psychological well-being. Therefore, developing and sustaining self-concepts are key motivators of behavior, including crime.

Theories of self contend that crime is useful to the perpetrator, not because of the direct products of crime, but because it potentially enhances self-esteem or confirms self-concepts.

Recent articulations represent the culmination of a long trend toward improvement of theories emphasizing identity (Heimer and Matsueda 1994; Kaplan 1995; Matsueda and Heimer 1997). The various elements of the identity theme are probably most completely brought together in Kaplan's (1980, 1995) description of self-derogation. According to his account, humans are compelled to maximize positive self-attitudes and avoid negative ones. The theory outlines the main influences on the direction and magnitude of personal evaluations as well as the prior conditions that affect them. When these influences produce negative self-evaluations, people's commitment to the normative system in which they are embedded weakens, and they become motivated to violate its norms. Criminal urges, therefore, come from a combination of absence, or weakening, of desire to conform to the norms of an aversive social context and of openness to possibilities that might improve the person's self-esteem.

Some misbehavior—like interpersonal contentiousness, which is not necessarily criminal—permits a self-derogating individual to elude people and circumstances that could reinforce any negative self-feelings (*avoidance*). Criminal acts such as violence, vandalism, or theft represent direct *attacks* on the sources of negative inputs and permit the self-derogator to express contempt for, and rejection of, the networks of norms that helped produce bad self-feelings. Finally, some forms of delinquency, such as gang fighting or drug dealing, reflect involvement with those whose norms contradict the ones that helped produce the person's negative self-attitudes, and those delinquent behaviors stem from efforts to find alternative networks with a greater likelihood of providing self-enhancing feedback. Some network *substitutions* involve new contexts that are inherently criminal, such as revolutionary groups, while others

produce criminal behavior indirectly, as the individual tries out various methods for pleasing the substitute group.

Theories of self contend that crime is useful to the perpetrator, not because of the direct products of crime, but because it potentially enhances self-esteem or confirms self-concepts. However, when a person tries to improve self-images through crime, such attempts may not work at all or may backfire. If specific criminal acts bring about the desired effects, an individual will probably continue them. If, on the other hand, specific misdeeds fail to solve the person's problems, other misbehavior is likely to follow.

Kaplan notes that whether misbehavior helps solve problems of self-attitude depends on a number of conditions, including the severity and certainty of punishment (which can exacerbate the situation), the nature of the criminal act itself (some criminal acts may make one lose still more self-esteem and may change how others react), and various characteristics of the person (such as accurate perception and moral considerations).

The self theme has strong intuitive appeal to many criminologists. Moreover, it enjoys some empirical support even though there is contrary evidence (for example, Jang and Thornberry 1998; Kaplan 1978; Heimer and Matsueda 1994; Rosenberg, Schooler, and Schoenbach 1989; Wells and Rankin 1983). In its fullest articulation, self-theory can potentially explain almost any kind of crime, delinquency, or deviance. In addition, although the theories emphasize deviant motivation, they accommodate a number of causal forces. Nevertheless, a number of central issues remain that could be addressed if self theories were more accommodating of other theoretical processes, such as general strain, learning, and social control. Why and how the search for identity turns toward self-definitions that result in criminal behavior is still not clear, the situational forces that activate deviant behaviors remain incompletely developed, and the convergence of self-phenomena with other variables, such as fear of sanction, deviant opportunities, or moral feelings, could be specified more completely by borrowing from other theories.

Rational choice

A fifth major theme in accounting for individual differences is as old as criminology (Beccaria [1764] 1963, Bentham [1780] 1948). The rational choice idea—that people weigh potential benefits against possible costs and decide rationally whether to commit crimes—was in disrepute among criminologists for the better part of this century. But beginning with a surge in the late 1960s and early 1970s (Andenaes 1974; Becker 1968; Chambliss 1967; Zimring and

Hawkins 1973), theorizing about rational decisions and criminal behavior has continued at a consistent pace (for example, Cornish and Clarke 1986; Geerken and Gove 1975; Grasmick and Bursik 1990; Stafford and Warr 1993). In addition, the basic notion of cost-benefit assessment has been incorporated into many accounts centering on the other themes discussed in this essay. For example, Kaplan's (1980) self-derogation theory specifies that the chances of being caught and punished affect whether crime is a viable option for those seeking to improve their self-esteem, and Agnew's (1992) general strain scheme identifies legal jeopardy as one contingency that affects the direction that solutions to the problem of strain take.

Despite much theorizing, the ubiquity of rational choice ideas, and a lot of empirical work (with mixed results) (including Bailey 1998; Foglia 1997; Weisburd and Chayet 1995), this theme has not yet spawned a definitive summary theory. It is presently expressed as a loose collection of principles expanding on three basic propositions sometimes referred to as the "deterrence doctrine" (Gibbs 1975). That doctrine assumes that people strive to maximize their pleasure (benefits, rewards) and minimize their pain (costs, disadvantages), so the probability of criminal behavior varies with the extent to which its benefits exceed the costs. In simple form, the scheme portrays humans like automatons with calculators in their heads. They constantly assess the costs and benefits of various potential actions, choosing those that register the greatest excess benefit and avoiding those that show more cost than benefit.

Traditionally, three contingencies for this process were identified: certainty (the probability of cost or reward), severity (the magnitude of potential cost), and celerity (the swiftness with which costs will accrue). Since most scholars have concentrated on cost, assuming the potential benefit to be a constant from person to person and situation to situation, "vulgar" deterrent thinking sees crime as an additive function of the certainty, severity, and celerity of punishment. Contemporary accounts, however, portray the process less cleanly (for example, Johnson and Payne 1986; Lattimore and Witte 1986; Tallman and Gray 1990), identifying four broad categories of variables that intrude into the basic rational choice process and influence evaluation and response to negative consequences:

- Characteristics of potential outcomes.
- Variations in psychic organization of individuals.
- Individual attributes.
- Situational variations.

The most obvious influences have to do with the nature of bad consequences. In addition to certainty, severity, and celerity—which some now think must be considered interactively rather than additively—outcome characteristics are presumably affected mainly or exclusively by subjective, rather than objective, evaluation. Furthermore, the source of the bad consequences is crucial—whether from people about whom a potential offender cares or from formal, impersonal authorities. Finally, consequences have different effects, according to the sequences and types of consequences. Rewards or costs, for example, may have cumulative effects or may lose effectiveness due to saturation.

Psychic organization concerns differences in what individuals interpret as rewards or costs, as well as variations in perceptual abilities and modes of information processing. Some experience as rewarding those reactions that are intended to be punishing, and people differ in how accurately they perceive the likelihood of various consequences. Furthermore, people may make irrational choices because of faulty information, because they lack the ability to manipulate probabilities correctly, or because they overvalue recent or personally poignant inputs (Cherniak 1986; Kahneman, Slovic, and Tversky 1982; but see Koehler 1996).

Contemporary thinkers also note that the likelihood of rational choosing varies by individual attributes, such as personality, moral commitments, and various demographic traits (Grasmick and Bursik 1990; Tittle 1980; Zimring and Hawkins 1973). Impulsivity, risk taking, and intelligence all affect the process, and theoretically there are differences in moral feelings that make some things more costly and less rewarding. In addition, individuals differ in their emotional commitments to certain behaviors (Chambliss 1967). There are also reasons to expect gender differences in assessment of costs and benefits, as well as variations by age, with youths perhaps being less sensitive to cost and more sensitive to reward. Finally, these theories point toward disparity in deterrence among cultural groupings around race, ethnicity, region, religion, and marital or family status. In general, those with more social responsibilities presumably anticipate more potential cost from criminal behavior, while the deprived presumably fear costs less and appreciate the potential rewards more.

Situational contingencies—such as the type of crime, shared perceptions, opportunity, the influence of role models and audiences, and social bonding—are theorized to affect the decisionmaking process. Some behavior, like addictive drug use, appears so compelling that rational thought fades into the background. Sometimes, groups mutually stimulate shared misperceptions, either of the rewards to be gained from illegal conduct or of its potential costs. At other times, group processes transform would-be costs into injustices that provoke defiance. Sometimes, people follow role models without personally assessing costs and benefits, and when people are tightly bonded to peers, the desire to

please them, to demonstrate courage, or to protect prestige (Short 1963) may divert rationality. Other situational or process variables sometimes come into play (Birkbeck and LaFree 1993; Luckenbill 1977; Strodtbeck and Short 1964). Thus, spur-of-the-moment behaviors are common, responses to provocative “victim precipitation” are well established, and interaction sequences seem to have a logic of their own, which does not necessarily correspond with conventional concepts of rationality.

Overall, then, utilitarian/deterrence theory is composed of a unitary organizing principle—balancing of cost and benefit—and a large number of contingencies that may come into play. Unfortunately, this collection of insights has not yet been integrated into a coherent synthetic general theory that shows how and why they all fit together. When that integration is attempted, no doubt many of the other theories in criminology will be helpful. For instance, strain may affect whether people think rationally or not, and theorizing about identities may help account for apparently irrational decisionmaking.

Control/integration

The final theme to explain individual criminal conduct concerns the inhibiting effect of social and psychological integration with others whose potential negative response, surveillance, and expectations regulate or constrain criminal impulses. This theme was first enunciated by Durkheim ([1893] 1933), [1895] 1951) and, as we will see later, has been prominent in theories about community, city, and societal differences in crime rates. It has also been a major focus for theories explaining why some individuals are more prone to crime than others. Perhaps more than any other theme, this one has maintained a steady influence in criminology. Its popularity may stem from the extraordinarily clear presentation of its theoretical rationale by Hirschi (1969), whose work has epitomized social control theorizing for nearly three decades.

Hirschi captured the arguments of a number of theorists when he specified that those with strong bonds to conventional social groups or institutions will be less likely to violate the law because they have less freedom to do so (Horwitz 1990). According to his synthesis, freedom stems from four sources:

- Absence of concern about other people and what they think or might do in response to deviant behavior (for example, Felson 1986; Freudenburg 1986; Reiss 1951).
- Not sharing moral beliefs with others (Braithwaite 1989; Hirschi 1969; Nye 1958).

- Limited investment of time and energy in trying to obtain conventional goals that would be jeopardized by misbehavior (Toby 1957).
- Not being involved in conventional activities that take up time and energy (Hirschi 1969; Reiss 1951; Toby 1957).

Though Hirschi did not call attention to it, people may also be freed to offend by situational circumstances that prevent misbehavior from being seen or that make it unlikely offenders will be recognized by anybody who might do something about it (Simmel [1903] 1971; Wirth [1938] 1969).

Control theories usually ignore the motivation, or strength of motivation, for criminal behavior, assuming that everybody is at least sufficiently inclined toward crime that it need not be treated as a variable. Some see differing degrees of motivation as an important contingency, but they often do not specify how strong the motivation must be in the face of different degrees of constraint in order for crime to occur. Clearly, this is one aspect of the theory that would benefit from some incorporation of causal arguments from other theories about criminal motivation. In addition, many theories with this theme focus exclusively on the central process of control, neglecting contingencies that might come into play.

There is enough empirical support for the overarching notion to lend it plausibility (Kempf 1993), and modern formulations do more than state general principles of control. Braithwaite (1989), for example, theorizes about combinations of conditions affecting social control, and he integrates a wide range of causal forces. His theory features informal control, which is made possible by social integration, and it explains the variation in rates of crime from one social unit to another as well as differences in crime among individuals. Here we are concerned with explaining differences among individuals, which are attributed to variations in integration (interdependency). Personal integration enhances the chances that individuals will be deterred from crime because they anticipate emotionally painful shaming.

A key process underlying both interdependency and deterrence is gossip. Gossip theoretically crystallizes norms, especially those that might not come into play very often in the individual's personal experiences, and it enunciates the potential consequences for violators. Participating in gossip, therefore, simultaneously strengthens commitment to the norms, reinforces conscience, and generates awareness that social disapproval will follow misbehavior. Although potential shame is portrayed as the chief mechanism deterring initial criminal conduct, its effect on those who go ahead and break the law is contingent on whether they are afforded opportunities for later redemption. Shaming

coupled with potential for reunification with the group is “reintegrative”; that accompanied by permanent stigma is “disintegrative.” Reintegrative shaming discourages recidivism by reinforcing social bonds, and it deflects the appeal of criminal subcultures. Stigmatizing shame, on the other hand, encourages criminal subcultures and high rates of recidivism.

The theory specifies a large number of influences on interdependency, reactions to crime, and exposure to criminal subcultures, and it suggests how various combinations of those conditions affect the probabilities of individual criminal behavior. In addition, it draws on anomie theory to explain why criminal subcultures are likely in societies where legitimate opportunities are systematically blocked for segments of the population. Thus, this formulation brings in original insights about gossip and shaming, and it synthesizes the causal effects of several themes already discussed.

Theories To Explain Lifecycle Changes

Although the bulk of theoretical work has focused on differences among individuals, criminologists have recently begun to focus on criminal propensity as it varies throughout the lifespan (for example, Blumstein et al. 1986; Laub and Sampson 1993; Loeber and Le Blanc 1990; Thornberry 1997b; Sampson and Laub 1993). Developmental issues have always been of concern to some criminologists, but it was not until the mid-1980s, with the publication of Hirschi and Gottfredson’s (1983) paper on age and crime and the Blumstein et al. (1986) volume on criminal careers that lifecycle changes and continuities attracted widespread attention. Hirschi and Gottfredson asserted that there is an invariant pattern of criminal liability by age that varies little from person to person, while Blumstein and his associates argued that there are marked individual differences in offending rates that do not necessarily follow the typical aggregate age-crime curve. Blumstein et al. and others (Blumstein, Cohen, and Farrington 1988; Loeber and Le Blanc 1990) identified a number of parameters about lifecourse offending—such as age of onset, rates of offending for different time periods, and lengths of criminal careers—but neither they nor Hirschi and Gottfredson offered explanations. In fact, Hirschi and Gottfredson claimed that explanation was both unnecessary and impossible.

Some attempts were made to use explanatory principles from theories about individual differences to explain lifecourse patterns. Despite recognition of an aggregate age-crime relationship resembling an inverted J-curve, the main generalizations were that individual misbehavior tends to be continuous from childhood to adulthood and that illegal behavior and social responses to it have reciprocal effects (for example, Sampson and Laub 1992; Tittle 1988;

Thornberry 1997a). Soon, however, more systematic attempts to explain developmental issues emerged.

Two-path theory

The most innovative approach to age-crime relationships and lifecourse patterns (Moffitt 1993) was described earlier. Recall that Moffitt's two-path theory contends that, as a result of neuropsychological deficits, some people have a more or less constant pattern of misbehavior throughout life. Others go through limited periods where they have high probabilities of offending, primarily in the teen years. Offending for this second group stems partly from structural disadvantage. Adolescents begin to desire the autonomy of adulthood but are prevented, by the nature of modern society, from realizing it legitimately. At that point, they are presumably influenced by the lifelong deviants who are already autonomous. Later, the adolescence-limited offenders gain autonomy legitimately and realize that the costs of misbehavior are too great. Thus, this theory combines insights about personal problems evident in early childhood with ideas about the status anxiety of teenagers (Greenberg 1981a; Sebald 1992) to provide explanations for two lifecourse patterns.

The two-path theory enjoys some research support (Moffitt 1997), though the crucial hypothesis of imitation has not been established. However, it does not explain other lifecourse patterns, such as youths without neuropsychological deficits who deviate from the typical paths that most adolescents take, or neuropsychologically deficated individuals who nevertheless settle into patterns of conventionality. To do that, the theory will probably have to incorporate additional causal elements.

Age-graded theory

A fuller account of lifecourse variation has been provided by Sampson and Laub (1993, 1997), who bring to the discussion of developmental issues ideas about informal social control. This theory emphasizes that career patterns of offending stem mainly from the nature and quality of an individual's social bonds as they intersect with, and help create, turning points in the lifecourse. For Laub and Sampson (1993), the lifecourse is a probabilistic set of linkages. Like Moffitt, they argue that people differ in initial human and social capital, which can influence patterns of development up to and through adulthood. However, changes toward or away from criminal behavior can also occur when role transitions and new environments lead to social investment or divestment or to the acquisition or loss of social capital in institutional relationships.

For example, someone with a history of offending may nevertheless become conventional due to a good marriage that binds the individual into networks of obligation and caring (not just marriage per se) or as a result of stable, meaningful employment. By contrast, those who have histories of conventionality may offend in response to events and circumstances that undermine previously restraining social bonds. Such conditions might include long periods of separation from home and family or prolonged periods of unemployment. Continuities and changes over the lifecourse result from episodic intersections of social and cultural capital with luck and chance. Also important are confluences of objective circumstances and subjective interpretations of what those circumstances mean, as well as macrolevel distributions of opportunities, both criminal and conventional, that may vary historically and by race and class.

This formulation is sufficiently broad to accommodate Moffitt's argument as well as previous ideas relevant to lifecourse variations. In fact, its authors have shown how it plays on numerous ideas current in criminology. Despite this broad sweep, age-graded theory does not explicitly integrate all of the variables necessary to specify relevant interacting conditions.

Other theories

Other attempts to identify causes of lifecourse transitions or stabilities have also appeared in recent years, and now most major theorists of individual differences try to show how the explanatory processes of their specific theories can be applied to lifecourse variations (Thornberry 1997b). For example, parenting has been identified as a crucial linkage (Simons et al. 1998) and, following the lead of Laub and Sampson, different theorists have shown how, in different ways, gaining and losing social or cultural capital might be a key link between various developmental stages and transitions (Matsueda and Heimer 1997; Nagin and Paternoster 1994; Sampson and Laub 1997). Most of those expanded formulations also synthesize parts of different theories of individual variations. In that same spirit, Le Blanc (1997) has identified a wide range of variables that interlink at various levels and in various ways to affect individual differences and lifecourse variations.

Though some disagree (Gottfredson and Hirschi 1986, 1990), recent trends suggest that theories of criminal behavior now must do more than explain differences among individuals. They must also explain why offending is more or less likely at different times in life, as well as how those patterns differ among individuals and in various social contexts. Such efforts will no doubt require further applications of the principles now embodied in theories of individual differences in offending, additional cross-fertilization among existing theories, and perhaps some innovative ideas concerning the lifecourse itself.

Theories To Explain Variations in Rates of Crime

A third prominent line of theorizing in criminology tries to explain why crime rates vary from society to society or among such social units as cities or communities. These theories can be broadly divided into three categories:

- Those that focus exclusively on macrolevel phenomena and processes (exclusive).
- Those that apply at the macro level but have individual-level analogs (mixed).
- Those that simply reify individual-level explanatory principles for application to aggregates (reified).

Exclusive macrolevel themes

Social disorganization/integration

Although most of the earliest criminologists (Beccaria [1764] 1963; Bentham [1780] 1948; Lombroso 1876, 1878–96) tried to explain why individuals commit crime (Rafter 1992), criminology in the United States is rooted in the study of urban settlements and communities. Scholars at the University of Chicago in the early part of this century were interested in why cities have higher crime rates than smaller places and why some neighborhoods and communities within cities persistently have higher rates of crime and delinquency than others. Building on previous work by Durkheim ([1893] 1933), Toennies ([1887] 1957), and Simmel ([1903] 1971), as well as on work by human ecologists (Hawley 1984), they (Wirth [1938] 1969; Shaw and McKay 1969) formulated a basic theory emphasizing collective levels of social control.

Cities were said to have more crime (and other “pathology”) than smaller sized places because large numbers, heterogeneity, and rapid population movement and turnover made it difficult for people to establish close relationships that could restrain misconduct. Crime rates of communities and neighborhoods within cities were also theorized to reflect within-city variations in heterogeneity and population turnover, but economic deterioration was substituted for large population size as a primary structural variable affecting intercommunity processes. According to the general theory, cities and deteriorated, unstable communities not only experience elevated levels of crime because of weak ability to regulate behavior, but they also contain unconventional role models (mainly because weak organization prevents efforts to keep them out) that stimulate criminal motivation. Thus, disorganized, noncohesive ecological units end

up with large numbers of their residents being highly motivated toward crime or delinquency and able to act on those motivations with impunity.

Despite the impetus to urban studies and criminology that it provided, the basic theory of social disorganization was, for a time, regarded by many as fatally flawed. The community version of the theory was heavily criticized, especially for obscuring differences between ecological and individual influences and for assuming unchanging ecological structures characteristic of Chicago at a particular point in history (Bursik 1988). At the same time, the intercity version of the theory was faulted for attributing outcomes to structural conditions when crime and other forms of "urbanism" may be simple reflections of population composition (Gans 1962; see Fischer 1984). In addition, charges were made that it exaggerated urban pathology, overestimated levels of personal isolation, and overlooked other sources of criminal conduct (Fischer 1975).

Consequently, the theory of social disorganization declined in influence. However, beginning in the 1980s and continuing to the present, the neighborhood version of the theory has attracted much attention, and a number of scholars have expanded and refined the original notion. Among those refinements are better specifications of the meaning of social organization/disorganization and the mechanisms by which it produces social control and regulation. Important contributions (Greenberg, Rohe, and Williams 1982, 1985) have been made in elaborating the importance of mutual surveillance, cultural understandings of neighborhood movement, and direct confrontations of suspicious behavior. Sampson (1987) extended to the intercommunity focus one element of the intercity version of social disorganization—the emphasis on interactions with strangers—contending that they not only make interpersonal bonds more tenuous, but also reduce the chances of intercession in instances of crime.

Building from Freudenburg (1986), Sampson and Groves (1989) also specified the importance of friendship networks and an individual's long-term community ties, and Sampson (1986a, 1986b) more explicitly brought in family functioning and linkages with formal social control. Bursik and Grasmick (1993)

Large, concentrated, heterogeneous populations enable those with unconventional interests to find and interact with one another. Such interactions lead to subcultures around shared interests. Subcultures stimulate motivations for law-breaking activities and help create opportunities for them. Moreover, the presence of many unconventional subcultures in an area helps create tolerance, leading to weakened social control.

noted the importance of membership and participation in voluntary associations, as well as the formal capacity of communities to elicit attention and resources from larger, more powerful external entities, such as the city government. Skogan (1990), Wilson and Kelling (1982), Greenberg (1986), and Taylor and Covington (1993) emphasized how fear among people in a neighborhood affects social control and generates perceptions of the lack of community organization, encouraging misbehavior. Taylor (1997) theorized that the mechanisms of social control are tied to small spatial units within neighborhoods, and he and Covington (1988) suggested that conditions of disorganization are linked to community change, not simply to population movement. Bellair (1997) imported into criminological theory the idea that even weak ties among neighbors are important for crime control. Finally, Wilson (1987, 1991) pointed to the connections between community organization and stable employment.

The neighborhood/community version of social disorganization, then, has become far more elaborate with the addition of elements and processes neither specified nor envisioned by Shaw and McKay (1969), and it has garnered considerable support (see Bursik 1988; Veysey and Messner 1999). Despite this, there is not yet a single coherent statement of the theory that incorporates all of the incremental refinements made by individual scholars. By contrast, the inter-city version of social disorganization theory has experienced little development. Instead, issues that might have been addressed through elaboration of social disorganization have been expressed in separate, competing theories, and many of the premises of city-level social disorganization have been siphoned off into other formulations.

Though some continue to find favorable test results (Tittle 1989) for city-level social disorganization theory, competing theories have become more prominent. One of them (Gottdiener and Feagin 1988) emphasizes political and economic forces in the world economy. Though its contentions are provocative, there is no well-articulated formulation. The other competing theory (Fischer 1975) is more explicitly stated and now enjoys at least modest empirical support (Fischer 1995).

Fischer's subcultural theory contends that large, concentrated, heterogeneous populations enable those with unconventional interests to find and interact with one another. Such interactions lead to subcultures around those shared interests. Subcultures, in turn, stimulate motivations for unconventional, law-breaking activities and help create opportunities for them. Moreover, the presence of many unconventional subcultures in an area helps create tolerance, leading to weakened social control. The causes of variations in rates of crime and delinquency from one urban place to the next, then, are traceable mainly to differences in the size

and heterogeneity of populations, as the social-control theorists maintained. However, subcultural theory poses a different intervening variable—a “critical mass” for subcultures, which promotes crime and other deviance.

Although Fischer’s subcultural theory uses many of the variables from social disorganization theory, it pays little attention to overall community organization, which is central to the mother theory. Nevertheless, his contention that the conditions of urban living (size, heterogeneity, density) force people to bifurcate their social contacts into public and private realms implies that cities will vary in overall degree of organization. In addition, disorganization probably interacts with the tolerance generated by competition among subcultures to produce weak social control. Therefore, it would appear important for the intercity version of social disorganization theory to incorporate Fischer’s insights, or vice versa.

Routine activities

A second line of thinking to explain crime rate variations among social units arose in the late 1970s. The routine activities theory (Cohen and Felson 1979; Cohen, Felson, and Land 1980; Felson 1998), sometimes called the opportunity theory, contends that rates of predatory crime reflect how three specific variables are distributed in time and space. Crime occurs when motivated offenders, suitable targets, and the absence of guardianship converge. Whether or not the three come together presumably reflects how people in a given social context conduct their lives and pursue sustenance activities.

Weak guardianship occurs when many activities take place outside the home and when people are frequently in the company of strangers. The suitability of targets for predatory crime has to do with the value and size of objects to be stolen or with the attractiveness of objects of rape or assault. The third element, motivated offenders, has generally been assumed to be constant among places and times. That is, the theorists have more or less conceded that there are always potential offenders who—given the opportunity created by suitable, unguarded targets—will act. Some researchers, on the other hand, have assumed that minorities, males, and youths have more motivation for illegal conduct and have therefore employed demographic measures as proxies for criminal motivation. In any case, rates of crime theoretically vary among societies, cities, communities, and local areas in accordance with the way the variables of the theory converge.

Because the theory does not specify which routine activities, of all that are practiced, should be relevant to crime, development has consisted mainly of efforts to identify the routine activities that actually affect crime rates. Felson

(1986) has also expanded the theory to show linkages between routine activities, informal control, and community organization and characteristics. This expansion illustrates how the theory could be improved by incorporating still other elements from extant theories. The neglect of causal arguments about why motivation for crime might vary represents a particularly important deficiency. More closely aligning routine activities and social disorganization theories would seem natural, since the same conditions that social disorganization theorists posit as causes of weak organization and ineffective social control are implicated in convergences of motivated offenders, suitable targets of crime, and poor guardianship.

Conflict

Causal processes and variables in the macrolevel theories reviewed so far all bear some similarities. A major departure, however, occurred in the 1960s, as a number of "conflict," "Marxian," or "radical" scholars discovered and applied ideas originated by Karl Marx. There are numerous versions of conflict theory and several styles of Marxian analysis. The most important conflict formulations are devoted to questions of criminalization and enforcement, but some aim to explain variations in rates of crime from society to society or place to place within societies (Bonger 1916; Quinney 1970; and several essays in Greenberg 1981b). In explaining rate variations, they focus on the structural conditions of competitively based economic systems (more specifically, capitalism) that both motivate citizens for crime and "de-moralize" them, thereby freeing them of constraints on their criminal impulses. These theories imply that rates of crime among societies vary with the degree to which their economic systems are capitalistic, or internally competitive, and they imply that within societies, variations in rates of crime among regions or cities will reflect market-oriented decisionmaking (see Greenberg 1981b, part 2).

Capitalism theoretically promotes selfishness and greed, which motivates people toward crime. At the same time, it undermines moral feelings or sentiment that might inhibit criminal behavior. The result, presumably, is selfish decision-making and a high rate of deviance in all capitalist societies, with rates of crime among them varying by the actual extent to which their economies are capitalistic. In addition, rates of crime among cities, regions, and communities within given societies reflect capitalistic economic decisions and their consequences for workers.

The dominant theoretical stream stemming from social disorganization theory has not incorporated the political and economic decisionmaking variables that are at the heart of Marxian conflict theory. And conflict theorists have paid little attention to the ideas of social disorganization, instead devoting their efforts to

pinpointing specific manifestations of capitalist activity affecting crime rates. Yet, each of these streams could benefit from taking the other seriously. For example, insights about capitalist decisionmaking could enhance social disorganization theory in the same way that the “new” urban sociology’s emphasis on global and local corporate decisionmaking might. Alternatively, Marxian conflict theory could be energized by admitting the influence of informal community networks or such structural conditions as population size and heterogeneity.

Mixed macrolevel themes

The theories reviewed above were designed for exclusive application to macrosocial units. Others, however, contain explanatory principles to account simultaneously for differences in criminal behavior among individuals, situations, social categories, and societies. Here, I focus only on the implications of these broader theories for explaining variations in rates of crime among large social entities, such as societies.

Anomie

Perhaps the most influential criminological theory of all time is that articulated by Merton (1938, 1957). His anomie formulation was inspired by Durkheim’s ([1895] 1951) observations that suicides increase during periods of social turmoil or rapid change, when the norms that guide people’s conduct are disrupted. Merton expanded this notion of normlessness to characterize societies in which social goals are not consistent with the objective realities of life. He contended that social entities can be classified by their relative emphases on the goals their members should seek to attain, compared with emphases on the appropriate or acceptable means for achieving these goals. A cross-classification yields four types of societies, one of which is well balanced or integrated (nonanomic) and three of which are malintegrated or unbalanced (anomic). Anomic societies overemphasize the means (ritualistic), have mixed emphases on goals and means (retreatist), or disproportionately stress goals (innovative). High rates of deviance would be predicted for all of the anomic societies, while lower rates would be expected for nonanomic societies; in one particular kind of anomic society—the innovative type—deviance is especially likely to take the form of predatory criminal behavior.

Not only are large numbers of people inspired to try to achieve culturally approved goals of success by illicit means (innovation), but the widespread effort to do so produces a culturally shared mentality of immorality.

Nonanomic (integrated, balanced) societies place more or less equal stress on the goals to be achieved and on the means to achieve them, thereby minimizing strain and misbehavior. Anomic societies produce higher rates of deviance because people do not know what they are supposed to try to accomplish, because they do not know how to do it, or because they do not have the specified means available to them to accomplish what they know they are expected to do. In other words, the members of anomic societies are under a lot of strain. That strain is especially likely to produce criminal behavior in a society, such as the United States, that places relatively greater emphasis on goal achievement than on the means for such achievement. Therefore, rates of predatory crime should vary directly with the extent to which societies place more stress on goal achievement than on the means for achieving those goals, and this should be particularly true when the cultural goals are for financial success, as they are in the United States. Alternatively, the theory can be interpreted to imply that rates of crime among smaller units, such as cities or communities, within anomic societies will be greatest where income or socioeconomic inequality is greatest (Agnew 1999).

Although Merton's work has macrolevel, microlevel, and cross-level implications and, in fact, was conceived to have mainly macrolevel import, its application to individual differences has been most popular. As a result, there have been few macrolevel developments of the basic ideas, and direct tests have focused only on variations in socioeconomic distributions in subsocietal units (Agnew 1999, 125). Recently, however, Messner and Rosenfeld (1997) have elaborated the Mertonian argument as it applies to U.S. society. They contend that an unbalanced emphasis on goals of financial success leads to two criminogenic consequences not anticipated by Merton. Not only are large numbers of people inspired to try to achieve culturally approved goals of success by illicit means (innovation), but the widespread effort to do so produces a culturally shared mentality of immorality. In addition, overemphasis on institutional domains governing financial matters makes it difficult to develop and sustain alternative institutional arrangements that might restrain drives toward predatory crime. The result is almost inevitably a high rate of crime. Their provocative analysis illustrating these points has already stimulated research (Chamlin and Cochran 1995) and will no doubt lead to further developments concerning the macro aspect of anomie theory.

General strain theory

The Mertonian argument has also been extended by Agnew, who has gone beyond anomie theory to produce a general formulation concerning various kinds of strain, not just that stemming from inconsistencies between culturally defined goals and available means for achieving those goals. As shown earlier,

Agnew's formulation concerns the effects of strain on individuals (1992) and on crime rates (1999). He contends that some social units have more crime than others partly because their features—including their organization and social, economic, and cultural characteristics—lead to the presence of large numbers of strained individuals who are motivated toward crime. Such communities are also less likely to exercise effective informal social control. He spells out seven conditions that promote widespread strain leading to higher crime rates. At the macro level, Agnew's work clearly demonstrates a developmental line from anomie theory, with integration of theories of social disorganization and routine activities, among others.

Shaming

Another recent theory with cross-level applications is that set forth by Braithwaite (1989), whose argument is partly borrowed from social disorganization and partly from anomie theories. Recall from the section on theories of individual differences that Braithwaite begins with the notion that highly interdependent social groups (those that are cohesively organized) generally have lower rates of crime, in part because social bonding enhances the effectiveness of informal social control. However, he adds two elements to the basic argument.

First, he theorizes that a key mechanism for binding people to each other and for preventing criminal behavior through deterrence is gossip; hence, a society with widespread patterns of gossip should have lower crime rates than one that fully respects privacy. Second, Braithwaite maintains that even though socially integrated societies will generally have lower rates of crime than those that are less cohesive, crime rates should also vary among reasonably well integrated societies, depending on *how* they deal with offenders. Societies may ignore offenders, they can punish them to cause pain or discomfort, or they can shame them. Shaming consists of efforts to make offenders take responsibility and feel genuine regret for the harm caused by their delicts. Other things being equal, rates of predatory crime should be greatest where nothing is done about it, second greatest where offenders are punished, and least where offenders are shamed. Shamed offenders are often motivated to atone for their misbehavior, but not all shaming has the same effect. Indeed, when shame is long term and stigmatizing, it frequently leads to recidivism, particularly if there are deviant subcultures populated by similarly stigmatized rule breakers. Only when shame is followed by procedures and efforts to reintegrate its recipients does it produce low rates of crime. Hence, those societies that shame violators and provide the means for their redemption will have the lowest rates of crime.

In addition to expanding the theory of social disorganization and bringing in new explanatory variables, Braithwaite integrates the macro version of anomie

theory. Criminal subcultures with which stigmatized law violators might affiliate are theorized to be most likely in anomic societies where large numbers experience blocked goal achievement.

Defiance

A further development draws from social disorganization and builds on the notion of shame. Sherman's defiance theory (1993) was intended to explain why sanctions imposed on individuals sometimes deter, sometimes have no effect, and sometimes have the opposite of their intended effect. Nevertheless, it also explains variations in crime rates. The theory implies that all societies impose or threaten negative sanctions for misbehavior, and the deterrent success of sanctioning accounts for differences in crime rates. Deterrence, however, depends on three conditions that must converge:

- Sanctions must be imposed with due respect for the dignity of alleged offenders.
- The recipients of sanctions must be bonded to the community or society whose representatives are imposing the sanctions.
- Offenders must be able to accept the shame implied by sanctions and, therefore, become motivated for reintegration with society.

Crime rates will vary among societies according to whether or not those three conditions typically hold.

Drawing on several bodies of theory, Sherman shows how and why these three conditions matter and how they fit together. Defiance theory, therefore, is a good example of the way contemporary theory is the culmination and integration of past work. Beginning with notions of community cohesion rooted in social disorganization theory, Sherman weaves in ideas about subcultures, shaming, and access to law. Moreover, his formulation includes additional components borrowed from deterrence and self theories. Yet it is not fully articulated, and it does not incorporate explanatory themes to account for initial acts of crime that might lead to sanctions.

Social learning

While social learning theory mainly explains the behavior of individuals, some theorists have also used it to try to explain variations in crime rates among social entities (Akers 1998; Sutherland 1924; Wilson and Herrnstein 1985). Sutherland introduced the idea of "differential social organization" for that

purpose. Borrowing from notions of “culture conflict,” he assumed that a heterogeneous cultural arena necessarily implies that for large numbers of individuals, crime-favorable messages will exceed messages unfavorable to crime. The theory is quite undeveloped, however, because it does not spell out how structural arrangements interface with differential learning to produce higher rates of crime in some social units than in others.

Other learning theorists have gone a little further. Wilson and Herrnstein (1985, 430–437) contend that criminogenic learning will vary depending on whether communities and societies emphasize institutions dedicated to impulse control and character building, which are somewhat linked to urbanization. Akers (1998) theorizes that variations in social structure and culture affect crime rates through their influences on the average reinforcements for criminal behavior that individuals within societies or other social entities experience. Among the structural characteristics that impinge on the overall likelihood of criminal learning, he includes such things as demographic composition, regional and geographical attributes, and other characteristics that concern the way social entities and subcultural systems are organized. This latter category could include weak neighborhood and family organizations.

To some extent, then, contemporary social learning theorists are drawing on the same pool of ideas that have inspired most other theories of rate variations; they simply identify different intervening processes and interpret effects as they bear on learned characteristics that impinge on crime.

Deprivation of law

A final theory of ecological variations was developed in the late 1970s (Black 1976, 1983) and is of interest mainly because it, like conflict theory, departs from the developmental pattern rooted in theories of social disorganization. Black’s deprivation-of-law theory proposes that rates of crime vary inversely with the availability of law for resolving disputes. Without law, inevitable human conflict will produce high rates of crime as individuals and groups seek to redress their own wrongs. Law, which is tied to the development of strong political entities with power over large populations, enables—indeed requires—disputing parties to submit personal arguments to third parties for resolution. The decisions that functionaries make are supposedly impartial, which gives disputants—who nearly always assume they are right—hope for victory. Although, as Black has shown, legal decisions actually closely follow lines of status and therefore are not impartial, they are upheld by force exercised by state authorities who claim a virtual monopoly on its use. Because of the appeal of law as a vehicle for settling disputes once and for all (eliminating or at least reducing the possibility of feud) without undue cost, and because of the

coercive element that requires the use of law and enforces its decision, rates of deviance are theorized to decline as states and their accompanying legal apparatuses grow. Therefore, the greater the development of law, the lower the rates of crime.

The apparent historical decline in crimes of violence (Gurr 1981) in some modern societies, the high rates of crime in some simple societies (Edgerton 1976, 1992), and patterns of change in concentrations of offenses (Cooney 1997) lend support to this argument. Nevertheless, the theory needs further development to spell out how variations in types and distributions of law in different societies produce varied effects. Moreover, the theory could be broadened by bringing in variables and conditions from other theories we have discussed. In return, other theoretical streams, such as social disorganization, could benefit from deprivation-of-law ideas.

Reified macrolevel themes

Some macrolevel theories are simply applications of those that explain microlevel phenomena, but with the assumption that whatever applies to individuals can be aggregated to explain rates of crime from one social entity to another. For instance, deterrence theory basically explains why individuals commit crimes. However, some scholars contend that differences in crime rates among social entities stem from differences in characteristics of enforcement bearing on the certainty and severity of punishment. Similarly, since demographic characteristics are influential in predicting individual probabilities of law violation (for various theoretical reasons encompassed in individual theories of crime), one can explain variations in rates of crime from place to place by considering the age and proportion of the population that is male, minority, and freed from familial and institutional affiliations (Steffensmeier and Harer 1999; Wellford 1973). Hence, almost any of the causal processes of the individual-level theories previously reviewed can be aggregated to explain variations in crime rates.

No single individual-level process alone, however, can provide adequate explanation at the macro level. Simple aggregation overlooks the potential interconnection between structural phenomena and individual behavior. Some potential connections may be contained in the various macrolevel theories we have been considering, so integration at that level is promising. But between-level integration must be considered as well. For example, social disorganization theory might benefit from fuller use of deterrence theory. Formal control imposed by authorities from an organized external entity could, under some conditions, compensate for weak informal control within neighborhoods. Alternatively, there may be important interactions between informal and formal social controls.

Theories About Differences in Criminal Behavior Among Situations

Scholars have often noted that even when all of the signs point toward a possible crime, it does not always materialize, and occasionally even when nobody would expect criminal behavior, it nevertheless transpires (Cohen 1966). Moreover, what may start out as an attempted theft sometimes ends up as a homicide or an assault (Miller 1998). Despite such observations, theories about situations have not shown a high level of development (Birkbeck and LaFree 1993; LaFree and Birkbeck 1991; Short 1998). Indeed, after the initial work of Short and Strodtbeck (1965), situational analysis languished until the mid-1980s. Since that time, however, some effort has been devoted to explaining why crime emerges in some situations but not in others (Birkbeck and LaFree 1993; Short 1997, 112–115, 136–141). This renewed attention to immediate contexts is important, because most of the other theories reviewed in this essay set the stage for criminal behavior without explaining how the script is played.

Situations can be thought of as unique arrangements of physical and social stimuli emerging from the various social settings to which individuals are exposed (Birkbeck and LaFree 1993, 129). Because they are always changing, and because they involve chance factors, criminal outcomes that evolve from various situations are not fully predictable. The challenge for theorists, then, has been to identify relevant aspects that come into play and to explain how and why those aspects fit together, either to produce criminal behavior or to lead away from crime. Birkbeck and LaFree also note that situations involve both objective and subjective components, but that the focal point is decision-making by potential offenders. They set forth four principles governing situational influences:

- Crime-relevant decisions are partially, but not wholly, determined by situational contingencies.
- Decisionmaking involves evaluation by potential offenders.
- The influence of situational factors varies by crime type.
- The level of attention that potential offenders pay to situational factors varies by both offender characteristics and crime type.

They go on to identify two major lines of theoretical development concerning circumstances leading to crime: symbolic interactionism and opportunity.

Symbolic interactionism

A major component of many, but not all, crime-relevant situations is interaction among two or more persons. Symbolic interactionist theory focuses on sequential, reciprocal response patterns in which interactants adjust to each other's behavior, note responses to their actions, interpret the meanings of those responses, and then adapt their next moves in accordance with those interpretations (Blumer 1969; Stryker 1980). A major process presumably guiding these sequences of actions is an individual's attempt to gain or preserve a meaningful sense of self (Kaplan 1980; Matsueda 1992). Interaction sequences, especially if they threaten identity claims, can sometimes lead to illegal behavior even though no criminal intent was originally intended, and the path that interaction takes can often determine the extent and specific form of criminal behavior (Felson and Steadman 1983; Katz 1988; Luckenbill 1977; Short 1963).

In the spirit of symbolic interactionism, if not with explicit acknowledgment, theorizing about crime-provoking situational characteristics has most often focused on events and actions interpreted by participants as threatening their status positions or their ideas about self. Short and Strodtbeck's theory, growing out of research on Chicago gangs, emphasizes that much violence and other criminal behavior is sparked by events interpreted as threats to the status of gang members or to the reputation of the gangs themselves (Short 1963; Short and Strodtbeck 1965). Such incidents often emerged more or less by chance (Strodtbeck and Short 1964), and some remarks or actions that might have been trivial were sometimes interpreted quite differently by various individuals.

In a similar vein, Luckenbill (1977) interprets homicide incidents as the end products of "character contests" that unfold in sequential steps. There is an initial attack on someone's identity, usually challenging that person's claim to a particular status. The attacked person takes offense and responds in kind, often with threats to harm the challenger if the attack is not withdrawn. The original party, feeling that retreat would be denigrating, continues or intensifies the attack. The conflict then proceeds to combat, with one or another of the participants eventually resorting to deadly force.

Katz (1988) portrays criminal behavior by those trying to create an "awesome presence" as an effort to achieve moral dominance by overcoming challenges to autonomy. And Anderson (1999) characterizes interaction among disadvantaged people as a constant struggle for respect in which individuals try to gain symbolic status advantages by attacking or challenging others, which leads to retaliation and destructive criminal outcomes.

All of these theorists regard the status/self concern as a subtext-guiding interaction, noting that outcomes of interaction sequences are not predetermined. There are spontaneous events and responses that can lead in a variety of directions, only some of which are criminal. Moreover, status or prestige contests are not the only events that can ultimately lead to in criminal outcomes (Luckenbill and Doyle 1989; Stafford and Gibbs 1993); indeed, disputes of all kinds seem to have a lifecourse that inclines toward criminal outcomes (Felstiner, Abel, and Aarat 1981). First, somebody experiences a negative event, which he perceives to be the fault of somebody else. Second, the injured party names the injury and blames the alleged wrongdoer, thereby creating a grievance. Third, the namer demands that the harmdoer fix the problem, which is called "claiming." If the accused party refuses to redress the wrong, a dispute is born. To deal with the dispute, the victim may then either capitulate, a choice that is often rejected because it represents a loss of face, or go on to use other tactics to try to prevail. When force is employed, the result is likely to be criminal. It has been suggested that the likelihood of this sequence being activated and spiraling to the level of violence is connected with cultural patterns of "disputatiousness" (Luckenbill and Doyle 1989).

Theoretical expectations are often wrong, or they rest on probabilities little better than chance; and in the best outcomes, predictions apply mainly to large aggregates.

Opportunity

A second line of theoretical work, though not always explicitly so stated, has been guided by the explanatory mechanisms embodied in routine activities theory (Cohen and Felson 1979). Various scholars have tried to isolate the elements in situations that attract or create motivated offenders and influence whether they perceive targets of crime as being possibilities that would justify the risk of offending (for example, Brantingham and Brantingham 1984; Cornish and Clarke 1986). Such factors as degree of lighting, presence of observers, location of houses on a block, police patrolling patterns, availability of valuable things to be stolen, and lifestyles of potential victims have been identified as relevant to these decisions.

LaFree and Birkbeck (1991) suggest that criminal choice is two staged: (1) the decision to enter a situation and (2) subsequent decisions in response to subjective evaluations of particular emergent features of that situation. They contend that individuals start with notions about how to assess situational contingencies.

Such predispositions, especially those concerning probable outcomes from specific behaviors in particular circumstances, are learned through experimentation and observation. Learned inclinations also include rules of conduct, such as expedience and morality, that the person might have internalized. These predispositions, however, interact with contextual events and circumstances. Behavior is seen as a continual process of matching actions to situations in order to maximize desired outcomes. Using these principles, LaFree and Birkbeck derive generalizations about situational clustering of criminal behavior.

Overview

Despite these efforts to explain situational variations, there is not yet a formulation that successfully brings all of the objective, subjective, and group process variables together into one coherent theory. As Short (1998) suggests, background (including things learned, cultural context, and personal characteristics) clearly matters, as do aspects of larger social contexts (such as neighborhood organization) but criminal behavior cannot be fully explained until theorists are able to specify how situational variations interact with those other influences. Since there are at least two classes of situational factors—opportunity and symbolic interactionist processes—they, too, probably interact among themselves as well as with variables representing individual characteristics and those of larger social contexts.

Signs of Progress and Directions for the Future

Criminological theorists have made huge strides in the past two decades and, at least within a probabilistic framework, are now able to broadly outline the causes of criminalization, criminal behavior, and variations in rates of crime among situations, communities, societies, and other social entities, as well as across the lifecourse. Despite this, theories are not yet developed enough to provide fully satisfying explanations or predictions. Theoretical expectations are often wrong, or they rest on probabilities little better than chance; and in the best outcomes, predictions apply mainly to large aggregates.

Additional efforts hold the promise of producing explanatory systems that can account for myriad criminal manifestations in precise and efficient ways. This optimistic appraisal comes from noting five important trends. First, over time, more and more scholars have become committed to theory development. Few criminologists are now content with ad hoc accounts, conceptual exercises, identifying risk factors, and directly investigating policy issues. Many have come to recognize that effective criminology systematically compiles knowledge within

theories that summarize, organize, and arrange evidence and thinking within coherent general explanatory schemes.

In addition, there are encouraging signs that criminologists are coming to demand more from theories. Yet continued progress will depend on still-wider appreciation for well-structured theories and for what they must be able to do. Consider, for example, Hirschi's version of control theory (1969). It sets forth a simple, universal causal process: Those strongly bonded to conventional social groups will refrain from acting on their natural impulses toward crime or delinquency. Though important and extremely popular, it ignores so much that effective application is difficult. Among other things, it pays no attention to possible variations in motivation for crime, disregards opportunity and other situational variables that may intensify or activate impulses for misbehavior, does not tell how people become bonded in the first place, and implies that control has the same effect, and to the same degree, for all kinds of crime and in all circumstances.

Clearly, numerous accouterments to the social bond theory are necessary to bring it to bear on specific issues about criminal behavior. At best, it predicts that for a large aggregate of individuals, those with the strongest bonds will be least likely to commit a crime. But without additional considerations, and without specifying the way these additional influences interact with social bonds and among themselves, Hirschi's behavioral principle does not provide good explanation of specific crime-relevant phenomena. (See Sheldon, Tracy, and Brown [1997, 39–40] for an attempt to apply the theory to explain why youths become gang members.) Similar incompleteness, to one degree or another, is characteristic of other theories. If the good ideas and powerful themes abundant in our discipline are to bear fruit, they have to be bundled within more complete formulations. It is customary to assume that "other" variables or conditions are to be "held constant" in testing, and that consumers of theory are to fill in the missing elements and make the specific applications. But in social life, conditions are not, in fact, constant, and different consumers make varied assumptions about the operation of other variables and contingencies, which is one reason tests and applications take so many incompatible forms. The goals of explanation, prediction, relevant tests, and application require that theories themselves actually do what consumers of those theories are now expected to do for them.

A third promising trend is the attempt to improve theories by merging parts or ideas from a variety of existing accounts. Sometimes this has been done self-consciously and with declaration (for example, Braithwaite 1989; Colvin and Pauly 1983; Elliott, Huizinga, and Ageton 1989), but most often it has occurred naturally as scholars tried to improve existing formulations. In fact, almost all of the theoretical developments reviewed in this essay involve some form of integration, though the theorists do not always recognize or acknowledge it.

For progress to continue, scholars must be able to measure such things as reintegrative shaming; self-control; general strain; human, social, and cultural capital; and control ratios.

Theorizing typically starts with limited causal processes, but later expands to include larger numbers of variables, processes, and contingencies. Such developments have led to overlaps among various theories, along with wider recognition of the advantages of bringing diverse ideas together and of borrowing from various extant accounts to create theories with more scope and more precise explanatory application.

Integration to join theories at different levels of generality, such as those describing individuals' behavior and those about group rates, however, has lagged behind (Le Blanc 1997; Short 1998). Some theories presumably explain things at various levels of generality (Agnew 1999; Braithwaite 1989; Merton 1938, 1957; Le Blanc 1997), but this often means that the explanatory principles are simply applied to two separate phenomena. Articulation between levels in some theories is accomplished by treating higher level conditions as contingencies for the operation of causal forces at lower levels of explanation, by thinking of different-level processes as interacting to affect outcomes (Short 1998), or by conceiving of mid-level phenomena as mediators between higher level and lower level phenomena (Elliott et al. 1996). But integrating various levels of explanation has never been completely successful. Moreover, it is common for theorists to slip from one level of explanation to another without recognizing errors that may occur. Ecological fallacies in drawing inferences from data are well known, but few recognize the theoretical parallels. Consequently, ideas like culture of violence and anomie are sometimes forced to explain individual behavior, with an ill-fitting result. Even less well recognized is the individualistic fallacy of trying to use causal mechanisms affecting individuals to explain societal phenomena that may have a reality beyond the aggregation of individual effects.

An additional indicator of progress is the increasing emphasis on theoretically driven research. More scholars now start with theoretical issues, frame their data collection and analysis to address those concerns, and assess the implications of the results for theory. Further progress depends on acceleration of this trend. Research oriented around theory serves two essential purposes. First, it helps in evaluating those theories. Theoretical success is partly based on predictive power—the ability to assert relationships among two or more variables that prove to be empirically accurate. If hypotheses appropriately deduced from a given theory repeatedly fail, the theory must be deficient. Typically, however, derived hypotheses prove to be partially true, or true under some conditions but not others. Such results can then be used to revise the theory. Through

continuous feedback, revision, derivation of new hypotheses, testing, and feedback, theories acquire greater adequacy. Second, theory tells researchers what to look for. Without theoretical guidance, much research is isolated, with little relevance to cumulating bodies of knowledge.

Finally, there is an emerging awareness that research practice is now lagging behind theory, a situation quite different from three decades ago. For one thing, contemporary theoretical developments involve key concepts that require data not now available, especially not in the large datasets on which so many researchers rely. For progress to continue, scholars must be able to measure such things as reintegrative shaming (Braithwaite 1989); self-control (Gottfredson and Hirschi 1990); general strain (Agnew 1992); human, social, and cultural capital (Matsueda and Heimer 1997; Nagin and Paternoster 1994); and control ratios (Tittle 1995). Identifying a single item or adding together a few indicators conveniently available in a data archive will no longer suffice.

In addition, despite contrary argument (Gottfredson and Hirschi 1986), adequate testing of the causal implications of all contemporary theories requires either experiments or temporally separated, repeated measurements of key variables. But researchers typically must employ data with inappropriate causal lags (see, for example, Chamlin et al. 1992; D'Alessio and Stolzenberg 1998). For example, to a large extent, Agnew's general strain argument portrays a short-term process. Strain is provoked by immediate events (though sometimes strain accumulates over a longer period of time), which generate emotional reactions. Those emotions must be managed (sometimes by criminal behavior), though the theory does not say how soon. The best test of the theory, and one that would also provide helpful feedback for more precisely specifying causal intervals, requires measures of strain (or a series of experiments), followed quite soon by measures of emotion, and then measures of various alternative behavioral and cognitive responses at multiple times. Yet researchers have been forced to use data with a time interval of a year or longer (Agnew and White 1992; Brezina 1996; Paternoster and Mazerolle 1994).

Weak data are not the only impediment. Even if perfect measurements at multiple times were available, many would probably still analyze them as if the theories predicted only linear, unidirectional effects. That is partly because theorists do not spell out other possibilities, but it is also because researchers are constrained by their analytic tools or their mindsets. Improvements in theory, which are essential to accomplish the goals that most criminologists endorse, depend somewhat on continued research advancements, and good research needs better theory to guide it.

Summary and Conclusions

Criminological theory has shown remarkable growth and progression over the past several decades, particularly by means of cross-fertilization and integration, and it now appears to contain the necessary elements to effectively explain crime patterns. Nevertheless, some of the most pressing questions remain unanswered, and reasonably accurate predictions seem to apply only to large aggregates. Signs are favorable for continued improvement, however. Criminologists are coming to recognize the necessity of good theory, becoming cognizant of the elements it must possess, and growing committed to its development. In addition, most of them are embracing integration as a style of work and a procedure for theory building and are showing they understand that research must be a handmaiden to, and dependent on, theory. Finally, the linkage between research methods and theoretical growth is becoming clearer, as more scholars are realizing that reliance on traditional types of data and on linear, unidirectional analyses must be transcended. If these trends continue, the outlook for future success is good.

References

- Abrahamsen, David. 1944. *Crime and the human mind*. New York: Columbia University Press.
- Adler, Freda, and William Laufer. 1995. *Advances in criminological theory: The legacy of anomie*. Vol. 6. New Brunswick, New Jersey: Transaction Publishers.
- Agnew, Robert. 1999. A general strain theory of community differences in crime rates. *Journal of Research in Crime and Delinquency* 36 (May): 123–155.
- . 1997. Stability and change in crime over the life course: A strain theory explanation. In *Developmental theories of crime and delinquency*, edited by Terence P. Thornberry. New Brunswick, New Jersey: Transaction Publishers.
- . 1992. Foundation for a general strain theory of crime and delinquency. *Criminology* 30 (February): 47–87.
- Agnew, Robert, and Helen Raskin White. 1992. An empirical test of general strain theory. *Criminology* 30 (August): 475–500.
- Aichhorn, August. [1925] 1968. *Wayward youth*. New York: Viking Press.
- Akers, Ronald L. 1998. *Social learning and social structure: A general theory of crime and deviance*. Boston: Northeastern University Press.
- . 1985. *Deviant behavior: A social learning approach*. 3d ed. Belmont, California: Wadsworth Publishing Company.

Andenaes, Johannes. 1974. *Punishment and deterrence*. Ann Arbor: University of Michigan Press.

Anderson, Elijah. 1999. *Code of the street: Decency, violence, and the moral life of the inner city*. New York: W.W. Norton.

Andrews, D.A., and James Bonta. 1994. *The psychology of criminal conduct*. Cincinnati: Anderson Publishing Company.

Bailey, William C. 1998. Deterrence, brutalization, and the death penalty: Another examination of Oklahoma's return to capital punishment. *Criminology* 36 (November): 711–733.

Bandura, Albert. 1977. *Social learning theory*. Englewood Cliffs, New Jersey: Prentice Hall.

———. 1969. *Principles of behavior modification*. New York: Holt, Rinehart and Winston.

Baron, Stephen W., and Timothy F. Hartnagel. 1997. Attributions, affect, and crime: Street youths' reactions to unemployment. *Criminology* 35 (August): 409–434.

Beccaria, Cesare. [1764] 1963. *On crimes and punishment*. Indianapolis: Bobbs-Merrill.

Becker, Gary. 1968. Crime and punishment: An economic approach. *Journal of Political Economy* 76 (January/February): 169–217.

Becker, H.S. 1963. *Outsiders: Studies in the sociology of deviance*. New York: Free Press.

Bellair, Paul E. 1997. Social interaction and community crime: Examining the importance of neighbor networks. *Criminology* 35 (November): 677–703.

Bentham, Jeremy. [1780] 1948. *The principles of morals and legislation*. New York: Hefner.

Bernard, Thomas J. 1990. Angry aggression among the “truly disadvantaged.” *Criminology* 28 (February): 73–96.

Birkbeck, Christopher, and Gary LaFree. 1993. The situational analysis of crime and deviance. *Annual Review of Sociology*: 113–137.

Black, Donald. 1983. Crime as social control. *American Sociological Review* 48 (February): 34–45.

———. 1976. *The behavior of law*. New York: Academic Press.

Blumer, Herbert. 1969. *Symbolic interactionism: Perspective and method*. Englewood Cliffs, New Jersey: Prentice Hall.

- Blumstein, Alfred, Jacqueline Cohen, and David P. Farrington. 1988. Criminal career research: Its value for criminology. *Criminology* 26 (1) (February): 1–35.
- Blumstein, Alfred, Jacqueline Cohen, Jeffrey A. Roth, and Christy Visser. 1986. *Criminal careers and "career criminals."* Washington, D.C.: National Academy Press.
- Bonger, Wilhelm Adrian. 1916. *Criminality and economic conditions.* Translated by Henry P. Horton. Boston: Little, Brown and Company.
- Braithwaite, John. 1989. *Crime, shame, and reintegration.* New York: Cambridge University Press.
- Brantingham, Paul J., and Patricia L. Brantingham. 1984. *Patterns in crime.* New York: Macmillan.
- Brehm, Sharon S., and Jack W. Brehm. 1981. *Psychological reactance: A theory of freedom and control.* New York: Academic Press.
- Brezina, Timothy. 1996. Adapting to strain: An examination of delinquent coping responses. *Criminology* 34 (February): 39–60.
- Broidy, Lisa, and Robert Agnew. 1997. Gender and crime: A general strain theory perspective. *Journal of Research in Crime and Delinquency* 3 (August): 275–306.
- Burgess, Robert L., and Ronald L. Akers. 1966. A differential association-reinforcement theory of criminal behavior. *Social Problems* 14 (May): 128–147.
- Bursik, Robert J., Jr. 1988. Social disorganization and theories of crime and delinquency: Problems and prospects. *Criminology* 26 (November): 519–551.
- Bursik, Robert J., Jr., and Harold G. Grasmick. 1993. *Neighborhoods and crime: The dimensions of effective community control.* New York: Lexington Books.
- Caspi, Avshalom, Terrie E. Moffitt, Phil Silva, Magda Stouthamer-Loeber, Robert Krueger, Pamela Schmutte. 1994. Are some people crime-prone? Replications of the personality-crime relationship across countries, genders, races, and methods. *Criminology* 32 (May): 163–195.
- Chambliss, William J. 1967. Types of deviance and the effectiveness of legal sanctions. *Wisconsin Law Review* (Summer): 703–719.
- Chamlin, Mitchell B., and John K. Cochran. 1995. Assessing Messner and Rosenfeld's institutional anomie theory: A partial test. *Criminology* 33 (August): 411–429.
- Chamlin, Mitchell B., Harold G. Grasmick, Robert J. Bursik, Jr., and John R. Cochran. 1992. Time aggregation and time lag in macro-level deterrence research. *Criminology* 30 (August): 377–395.

Cherniak, Christopher. 1986. *Minimal rationality*. Cambridge: Massachusetts Institute of Technology Press.

Clinard, Marshall B., ed. 1964. *Anomie and deviant behavior: A discussion and critique*. New York: Free Press.

Cohen, Albert K. 1966. *Deviance and control*. Englewood Cliffs, New Jersey: Prentice Hall.

———. 1955. *Delinquent boys: The culture of the gang*. New York: Free Press.

Cohen, Lawrence, and Marcus Felson. 1979. Social change and crime rate trends: A routine activities approach. *American Sociological Review* 44 (August): 588–608.

Cohen, Lawrence, Marcus Felson, and Kenneth Land. 1980. Property crime rates in the United States: A macrodynamic analysis. 1947–1977, with ex-ante forecasts for the mid-1990s. *American Journal of Sociology* 86 (July): 90–118.

Colvin, Mark, and John Pauly. 1983. A critique of criminology: Toward an integrated structural-Marxist theory of delinquency production. *American Journal of Sociology* 89 (November): 513–531.

Conger, Rand D., and Ronald L. Simons. 1997. Life-course contingencies in the development of adolescent antisocial behavior: A matching law approach. In *Developmental theories of crime and delinquency*, edited by Terence P. Thornberry. New Brunswick, New Jersey: Transaction Publishers.

Cooney, Mark. 1997. The decline of elite homicide. *Criminology* 35 (August): 381–407.

Cornish, Derek B., and Ronald V. Clarke, eds. 1986. *The reasoning criminal: Rational choice perspectives on offending*. New York: Springer-Verlag.

Cullen, Francis T., Paul Gendreau, G. Roger Jarjoura, and John Paul Wright. 1997. Crime and the bell curve: Lessons from intelligent criminology. *Crime & Delinquency* 43 (October): 387–411.

D'Alessio, Stewart J., and Lisa Stolzenberg. 1998. Crime, arrests, and pretrial jail incarceration: An examination of the deterrence thesis. *Criminology* 36 (November): 735–761.

Durkheim, Emile. [1895] 1951. *Suicide: A study in sociology*. Glencoe, Illinois: Free Press.

———. [1893] 1933. *The division of labor in society*. New York: Macmillan.

Edgerton, Robert B. 1992. *Sick societies: Challenging the myth of primitive harmony*. New York: Free Press.

———. 1976. *Deviance: A cross-cultural perspective*. Menlo Park, California: Cummings.

Elliott, Delbert S., David Huizinga, and Susanne S. Ageton. 1989. *Multiple problem youth: Delinquency, substance use, and mental health problems*. New York: Springer-Verlag.

Elliott, Delbert S., William Julius Wilson, David Huizinga, Robert J. Sampson, Amanda Elliott, and Bruce Rankin. 1996. The effects of neighborhood disadvantage on adolescent development. *Journal of Research in Crime and Delinquency* 33 (November): 389–426.

Eysenck, Hans J., and Gisli H. Gudjonsson. 1989. *The causes and cures of criminality*. New York: Plenum Press.

Felson, Marcus. 1998. *Crime and everyday life*. 2d ed. Thousand Oaks, California: Pine Forge Press.

———. 1986. Linking criminal choices, routine activities, informal control, and criminal outcomes. In *The reasoning criminal: Rational choice perspectives on offending*, edited by Derek B. Cornish and Ronald V. Clarke. New York: Springer-Verlag.

Felson, Richard B., and Henry J. Steadman. 1983. Situational factors in disputes leading to criminal violence. *Criminology* 21 (February): 59–74.

Felstiner, William L.F., Richard L. Abel, and Austin Aarat. 1981. The emergence and transformation of disputes: Naming, blaming, claiming. *Law & Society Review* 15 (3–4): 631–654.

Fischer, Claude. 1995. The subcultural theory of urbanism: A twentieth-year assessment. *American Journal of Sociology* 101 (November): 543–577.

———. 1984. *The urban experience*. 2d ed. New York: Harcourt Brace Jovanovich.

———. 1975. Toward a subcultural theory of urbanism. *American Journal of Sociology* 80 (May): 1319–1341.

Foglia, Wanda D. 1997. Perceptual deterrence and the mediating effect of internalized norms among inner-city teenagers. *Journal of Research in Crime and Delinquency* 34 (November): 414–442.

Fowles, Richard, and Mary Merva. 1996. Wage inequality and criminal activity: An extreme bounds analysis for the United States, 1975–1990. *Criminology* 34 (May): 163–182.

Freudenburg, William R. 1986. The density of acquaintanceship: An overlooked variable in community research? *American Journal of Sociology* 92 (February): 27–63.

Gans, Herbert. 1962. Urbanism and suburbanism as ways of life: A reevaluation of definitions. In *Human behavior and social processes*, edited by Arnold M. Rose. Boston: Houghton Mifflin Company.

Gastil, Raymond D. 1971. Homicide and a regional culture of violence. *American Sociological Review* 36 (June): 412–427.

Geerken, Michael, R., and Walter R. Gove. 1975. Deterrence: Some theoretical considerations. *Law & Society Review* 9 (3): 497–513.

Gibbs, Jack P. 1975. *Crime, punishment, and deterrence*. New York: Elsevier Scientific.

———. 1966. Conceptions of deviant behavior: The old and the new. *Pacific Sociological Review* 9 (Spring): 9–14.

Glaser, Daniel. 1978. *Crime in our changing society*. New York: Holt, Rinehart and Winston.

Gottdiener, M., and Joe R. Feagin. 1988. The paradigm shift in urban sociology. *Urban Affairs Quarterly* 24 (December): 163–187.

Gottfredson, Michael R., and Travis Hirschi. 1990. *A general theory of crime*. Stanford, California: Stanford University Press.

———. 1986. The true value of lambda would appear to be zero: An essay on career criminals, criminal careers, selective incapacitation, cohort studies, and related topics. *Criminology* 24 (May): 213–234.

Gove, Walter R., ed. 1980. *The labelling of deviance: Evaluating a perspective*. New York: John Wiley & Sons.

Grasmick, Harold G., and Robert J. Bursik, Jr. 1990. Conscience, significant others, and rational choice: Extending the deterrence model. *Law & Society Review* 24 (3): 837–861.

Greenberg, David F. 1981a. Delinquency and the age structure of society. In *Crime and capitalism: Readings in Marxist criminology*, edited by David F. Greenberg. Palo Alto, California: Mayfield.

Greenberg, David F., ed. 1981b. *Crime and capitalism: Readings in Marxist criminology*. Palo Alto, California: Mayfield.

Greenberg, Stephanie W. 1986. Fear and its relationship to crime, neighborhood deterioration, and informal social control. In *The social ecology of crime*, edited by James M. Byrne and Robert J. Sampson. New York: Springer-Verlag.

Greenberg, Stephanie, William H. Rohe, and Jay R. Williams. 1985. *Informal citizen action and crime prevention at the neighborhood level—Executive summary*. NCJ 97977. Washington, D.C.: U.S. Department of Justice, National Institute of Justice.

Greenberg, Stephanie, William M. Rohe, and Jay R. Williams. 1982. *Safe and secure neighborhoods: Physical characteristics and informal territorial control in high and low crime neighborhoods—Final report*. NCJ 81044. Washington, D.C.: U.S. Department of Justice, National Institute of Justice.

Gurr, Ted R. 1981. Historical trends in violent crimes: A critical review of the evidence. In *Crime and justice: An annual review of research*, edited by Michael Tonry and Norval Morris. Vol. 3. Chicago: University of Chicago Press.

Hagan, John. 1997. Crime and capitalization: Toward a developmental theory of street crime in America. In *Developmental theories of crime and delinquency*, edited by Terence P. Thornberry. New Brunswick, New Jersey: Transaction Publishers.

Hagan, John, Gerd Hefler, Gabriele Classen, Klaus Boehnke, and Hans Merkens. 1998. Subterranean sources of subcultural delinquency beyond the American dream. *Criminology* 36 (May): 309–339.

Hawley, Amos H. 1984. *Sociological human ecology*. In *Sociological human ecology*, edited by Michael Micklin and Harvey M. Choldin. Boulder, Colorado: Westview Press.

Heimer, Karen, and Ross L. Matsueda. 1994. Role-taking, role commitment, and delinquency: A theory of differential social control. *American Sociological Review* 59 (April): 365–390.

Hirschi, Travis. 1969. *Causes of delinquency*. Berkeley: University of California Press.

Hirschi, Travis, and Michael Gottfredson. 1983. Age and the explanation of crime. *American Journal of Sociology* 89 (January): 552–584.

Horwitz, Allen V. 1990. *The logic of social control*. New York: Plenum Press.

Jang, Sung Joon, and Terence P. Thornberry. 1998. Self-esteem, delinquent peers, and delinquency: A test of the self-enhancement thesis. *American Sociological Review* 63 (June): 586–598.

Johnson, Eric, and John Payne. 1986. The decision to commit a crime: An information-processing analysis. In *The reasoning criminal: Rational choice perspectives on offending*, edited by Derek B. Cornish and Ronald V. Clarke. New York: Springer-Verlag.

Kahneman, Daniel, Paul Slovic, and Amos Tversky. 1982. *Judgment under uncertainty: Heuristics and biases*. Cambridge: Cambridge University Press.

Kandel, Elizabeth, and Sarnoff A. Mednick. 1991. Perinatal complications predict violent offending. *Criminology* 29 (November): 519–529.

Kaplan, Howard B. 1995. Drugs, crime, and other deviant adaptations. In *Drugs, crime, and other deviant adaptations: Longitudinal studies*, edited by Howard B. Kaplan. New York: Plenum Press.

- . 1980. *Deviant behavior in defense of self*. New York: Academic Press.
- . 1978. Self attitudes and deviant response. *Social Forces* 54 (March): 788–801.
- . 1975. *Self-attitudes and deviant behavior*. Pacific Palisades, California: Goodyear.
- Katz, Jack. 1988. *Seductions of crime: Moral and sensual attractions in doing evil*. New York: Basic Books.
- Kempf, Kimberly. 1993. The empirical status of Hirschi's control theory. In *Advances in criminological theory*, edited by William S. Laufer and Freda Adler. Vol. 4. New Brunswick, New Jersey: Transaction Publishers.
- Kendall-Tackett, Kathleen, Linda Meyer Williams, and David Finkelhor. 1993. Impact of sexual abuse on children: A review and synthesis of recent empirical studies. *Psychological Bulletin* 113 (January): 164–180.
- Koehler, Jonathan J. 1996. The base rate fallacy reconsidered: Descriptive, normative, and methodological challenges. *Behavioral and Brain Sciences* 19 (March): 1–17.
- Kovandic, Tomislav, Lynne M. Vieraitis, and Mark R. Yeisley. 1998. The structural covariates of urban homicide: Reassessing the import of income inequality and poverty in the post-Reagan era. *Criminology* 36 (February): 569–599.
- LaFree, Gary, and Christopher Birkbeck. 1991. The neglected situation: A cross-national study of the situational characteristics of crime. *Criminology* 29 (February): 73–98.
- Lattimore, Pamela, and Ann Witte. 1986. Models of decision making under uncertainty: The criminal choice. In *The reasoning criminal: Rational choice perspectives on offending*, edited by Derek B. Cornish and Ronald V. Clarke. New York: Springer-Verlag.
- Laub, John H., and Robert J. Sampson. 1993. Turning points in the life course: Why change matters in the study of crime. *Criminology* 31 (3) (August): 301–326.
- Le Blanc, Marc. 1997. A generic control theory of the criminal phenomenon: The structural and dynamic statements of an integrative multilayered control theory. In *Developmental theories of crime and delinquency*, edited by Terence P. Thornberry. New Brunswick, New Jersey: Transaction Publishers.
- Loeber, Rolf, and Marc Le Blanc. 1990. Toward a developmental criminology. In *Crime and justice: A review of research*, edited by Michael Tonry and Norval Morris. Vol. 12. Chicago: University of Chicago Press.
- Lofland, John. 1969. *Deviance and identity*. Englewood Cliffs, New Jersey: Prentice Hall.

- Lombroso, Cesare. *The criminal man (L'uomo delinquente)*. 1st ed. 1876. Milan: Hoepli. 2d ed. (1878) through 5th ed. (1896). Turin: Bocca.
- Luckenbill, David F. 1977. Criminal homicide as a situated transaction. *Social Problems* 25 (May): 176–186.
- Luckenbill, David F., and Daniel P. Doyle. 1989. Structural position and violence: Developing a cultural explanation. *Criminology* 27 (August): 419–436.
- Matsueda, Ross L. 1992. Reflected appraisals, parental labeling, and delinquency: Specifying a symbolic interactionist theory. *American Journal of Sociology* 97 (May): 1577–1611.
- Matsueda, Ross L., and Karen Heimer. 1997. A symbolic interactionist theory of role-transitions, role commitments, and delinquency. In *Developmental theories of crime and delinquency*, edited by Terence P. Thornberry. New Brunswick, New Jersey: Transaction Publishers.
- Matza, David. 1964. *Delinquency and drift*. New York: John Wiley & Sons.
- Matza, David, and Gresham M. Sykes. 1964. Juvenile delinquency and subterranean values. *American Sociological Review* 26 (November): 712–719.
- Mednick, Sarnoff A., and Elizabeth Kandel. 1988. Genetic and perinatal factors in violence. In *Biological contributions to crime causation*, edited by Terrie E. Moffitt and Sarnoff A. Mednick. Boston: Martinus Nijhoff.
- Merton, Robert K. 1957. Social structure and anomie. In *Social theory and social structure*, edited by Robert K. Merton. Glencoe, Illinois: Free Press.
- . 1938. Social structure and anomie. *American Sociological Review* 3 (October): 672–682.
- Messner, Steven F., and Richard Rosenfeld. [1994] 1997. *Crime and the American dream*. 2d ed. Belmont, California: Wadsworth Publishing Company.
- Miller, Jody. 1998. Up it up: Gender and the accomplishment of street robbery. *Criminology* 36 (February): 37–65.
- Miller, Walter B. 1958. Lower-class culture as a generating milieu of gang delinquency. *Journal of Social Issues* 14 (3): 5–19.
- Moffitt, Terrie E. 1997. Adolescence-limited and life-course persistent offending: A complementary pair of developmental theories. In *Developmental theories of crime and delinquency*, edited by Terence P. Thornberry. New Brunswick, New Jersey: Transaction Publishers.

- . 1993. Adolescence-limited and life-course persistent anti-social behavior: A developmental taxonomy. *Psychological Review* 100 (October): 674–701.
- . 1990. The neuropsychology of juvenile delinquency: A critical review. In *Crime and justice: A review of research*, edited by Michael Tonry and Norval Morris. Vol. 12. Chicago: University of Chicago Press.
- Moffitt, Terrie E., Donald R. Lynam, and Phil A. Silva. 1994. Neuro-psychological tests predicting persistent male delinquency. *Criminology* 32 (May): 277–302.
- Nagin, Daniel S., and Raymond Paternoster. 1994. Personal capital and social control: The deterrence implications of a theory of individual differences in criminal offending. *Criminology* 32 (November): 581–606.
- Nye, F. Ivan. 1958. *Family relationships and delinquent behavior*. New York: John Wiley & Sons.
- Paternoster, Raymond, and Lee Ann Iovanni. 1989. The labeling perspective and delinquency: An elaboration of the theory and an assessment of the evidence. *Justice Quarterly* 6 (September): 379–394.
- Paternoster, Raymond, and Paul Mazerolle. 1994. An empirical test of general strain theory. *Journal of Research in Crime and Delinquency* 31 (August): 235–263.
- Payne, William D. 1973. Negative labels: Passageways and prisons. *Crime & Delinquency* 19 (January): 33–40.
- Pearson, Frank S., and Neil Alan Weiner. 1985. Toward an integration of criminological theories. *Journal of Criminal Law and Criminology* 76 (Spring): 116–150.
- Quinney, Richard. 1970. *The problem of crime*. New York: Dodd, Mead.
- Rafter, Nicole Hahn. 1992. Criminal anthropology in the United States. *Criminology* 30 (November): 525–545.
- Raine, Adrian. 1993. *The psychopathology of crime: Criminal behavior as a clinical disorder*. San Diego: Academic Press.
- Reiss, Albert J. 1951. Delinquency as a failure of personal and social controls. *American Sociological Review* 16 (February): 196–207.
- Rosenberg, Florence R., and Morris Rosenberg. 1978. Self-esteem and delinquency. *Journal of Youth and Adolescence* 7 (September): 279–291.
- Rosenberg, Morris, Carmi Schooler, and Carrie Schoenbach. 1989. Self-esteem and adolescent problems: Modeling reciprocal effects. *American Sociological Review* 54 (October): 1004–1018.

Sampson, Robert J. 1987. Communities and crime. In *Positive criminology*, edited by Michael R. Gottfredson and Travis Hirschi. Beverly Hills, California: Sage Publications.

———. 1986a. Crime in cities: The effects of formal and informal social control. In *Communities and crime*, edited by Albert J. Reiss, Jr., and Michael Tonry. Vol. 8 of *Crime and justice: A review of research*. Chicago: University of Chicago Press.

———. 1986b. Neighborhood family structure and the risk of personal victimization. In *The social ecology of crime*, edited by James M. Bryne and Robert J. Sampson. New York: Springer-Verlag.

Sampson, Robert J., and W. Byron Groves. 1989. Community structure and crime: Testing social-disorganization theory. *American Journal of Sociology* 94 (January): 774–802.

Sampson, Robert J., and John H. Laub. 1997. A life-course theory of cumulative disadvantage and the stability of delinquency. In *Developmental theories of crime and delinquency*, edited by Terence P. Thornberry. New Brunswick, New Jersey: Transaction Publishers.

———. 1993. *Crime in the making: Pathways and turning points through life*. Cambridge: Harvard University Press.

———. 1992. Crime and deviance in the life course. *Annual Review of Sociology* 18:63–84.

Sebold, Hans. 1992. *Adolescence: A social psychological analysis*. 4th ed. Englewood Cliffs, New Jersey: Prentice Hall.

Shaw, Clifford R., and Henry D. McKay. 1969. *Juvenile delinquency and urban areas*. Rev. ed. Chicago: University of Chicago Press.

Shelden, Randall G., Sharon K. Tracy, and William B. Brown. 1997. *Youth gangs in American society*. Belmont, California: Wadsworth Publishing Company.

Sherman, Lawrence W. 1993. Defiance, deterrence, and irrelevance: A theory of the criminal sanction. *Journal of Research in Crime and Delinquency* 30 (November): 445–473.

Short, James F., Jr. Forthcoming. Technology, risk analysis, and the challenge of social control. In *Contemporary issues in crime and criminal justice: Essays in honor of Gilbert Geis*, edited by Henry Pontell and David Shichor. Englewood Cliffs, New Jersey: Prentice Hall.

———. 1998. The level of explanation problem revisited: The American Society of Criminology 1997 Presidential Address. *Criminology* 36 (February): 3–36.

———. 1997. *Poverty, ethnicity, and violent crime*. Boulder, Colorado: Westview Press.

———. 1963. The responses of gang leaders to status threat: An observation on group process and delinquent behavior. *American Journal of Sociology* 68 (November): 571–579.

Short, James F., Jr., and Fred L. Strodbeck. 1965. *Group process and gang delinquency*. Chicago: University of Chicago Press.

Simmel, Georg. [1903] 1971. The metropolis and mental life. In *On individuality and social forms*, edited by Donald N. Levine. Chicago: University of Chicago Press.

Simons, Ronald L., Christine Johnson, Rand D. Conger, and Glen Elder, Jr. 1998. A test of latent trait versus life-course perspectives on the stability of adolescent anti-social behavior. *Criminology* (May): 217–243.

Skogan, Wesley G. 1990. *Disorder and decline: Crime and the spiral of decay in American neighborhoods*. New York: Free Press.

Smith, Carolyn, and Terence P. Thornberry. 1995. The relationship between childhood maltreatment and adolescent involvement in delinquency. *Criminology* 33 (November): 451–481.

Stafford, Mark C., and Jack P. Gibbs. 1993. A theory about disputes and the efficacy of control. In *Aggression and violence: Social interactionist perspectives*, edited by Richard B. Felson and James T. Tedeschi. Washington, D.C.: American Psychological Association.

Stafford, Mark, and Mark Warr. 1993. A reconceptualization of general and specific deterrence. *Journal of Research in Crime and Delinquency* 30 (May): 123–140.

Steffensmeier, Darrell, and Miles D. Harer. 1999. Making sense of recent U.S. crime trends: 1980 to 1996/1998—Age composition effects and other explanations. *Journal of Research in Crime and Delinquency* 36 (August): 235–274.

Strodbeck, Fred L., and James F. Short, Jr. 1964. Aleatory risks versus short-run hedonism in explanation of gang action. *Social Problems* 12 (May): 127–140.

Stryker, Sheldon. 1980. *Symbolic interactionism*. Menlo Park, California: Benjamin/Cummins.

Sutherland, Edwin H. 1924. *Criminology*. Philadelphia: J.B. Lippincott.

Sykes, Gresham, and David Matza. 1957. Techniques of neutralization: A theory of delinquency. *American Sociological Review* 22 (August): 664–670.

Tallman, Irving, and Louis Gray. 1990. Choices, decisions, and problem-solving. *Annual Review of Sociology* 16:405–433.

- Taylor, Ralph B. 1997. Social order and disorder of street blocks and neighborhoods: Ecology, microecology, and the systematic model of social disorganization. *Journal of Research in Crime and Delinquency* 34 (February): 113–155.
- Taylor, Ralph B., and Jeanette Covington. 1993. Community structural change and fear of crime. *Social Problems* 40 (August): 374–397.
- . 1988. Neighborhood changes in ecology and violence. *Criminology* 26 (November): 553–589.
- Thornberry, Terence P. 1997a. Introduction: Some advantages of developmental and life-course perspectives for the study of crime and delinquency. In *Developmental theories of crime and delinquency*, edited by Terence P. Thornberry. New Brunswick, New Jersey: Transaction Publishers.
- Thornberry, Terence P., ed. 1997b. *Developmental theories of crime and delinquency*. New Brunswick, New Jersey: Transaction Publishers.
- Tittle, Charles R. 1995. *Control balance: Toward a general theory of deviance*. Boulder, Colorado: Westview Press.
- . 1989. Influences on urbanism: A test of predictions from three perspectives. *Social Problems* 36 (June): 270–288.
- . 1988. Two empirical regularities (maybe) in search of an explanation: Commentary on the age-crime debate. *Criminology* 26 (1) (February): 75–86.
- . 1980. *Sanctions and social deviance: The question of deterrence*. New York: Praeger.
- Toby, Jackson. 1957. Social disorganization and stake in conformity: Complementary factors in the predatory behavior of hoodlums. *Journal of Criminal Law, Criminology, and Police Science* 48 (May/June): 12–17.
- Toennies, Ferdinand. [1887] 1957. *Community and society (Gemeinschaft and Gesellschaft)*. Translated and edited by Charles P. Loomis. East Lansing: Michigan State University Press.
- Veysey, Bonita M., and Steven F. Messner. 1999. Further testing of social disorganization theory: An elaboration of Sampson and Grove's "community structure and crime." *Journal of Research in Crime and Delinquency* 36 (May): 156–174.
- Weisburd, Elin Waring, and Ellen Chayet. 1995. Specific deterrence in a sample of offenders convicted of white-collar crime. *Criminology* 33 (November): 587–607.
- Wellford, Charles. 1975. Labeling theory and criminology: An assessment. *Social Problems* 22 (August): 335–347.

———. 1973. Age composition and the increase in recorded crime. *Criminology* 2 (February): 61–70.

Wells, L. Edwards, and Joseph H. Rankin. 1983. Self-concept as a mediating factor in delinquency. *Social Psychology Quarterly* 46 (March): 11–22.

Widom, Cathy Spatz. 1989. Child abuse, neglect, and violent criminal behavior. *Criminology* 27 (May): 251–271.

Wilson, James Q., and Richard Herrnstein. 1985. *Crime and human nature*. New York: Simon & Schuster.

Wilson, James Q., and George Kelling. 1982. Broken windows. *Atlantic Monthly* (March): 29–38.

Wilson, William J. 1991. Studying inner-city social dislocations. *American Sociological Review* 56 (February): 1–14.

———. *The truly disadvantaged: The inner city, the underclass, and public policy*. Chicago: University of Chicago Press.

Wirth, Louis. [1938] 1969. Urbanism as a way of life. In *Classic essays on the culture of cities*, edited by Richard Sennett. New York: Appleton-Century-Crofts.

Wolfgang, Marvin E., and Franco Ferracuti. 1967. *The subculture of violence*. London: Social Science Paperbacks.

Zimring, Franklin, and Gordon Hawkins. 1973. *Deterrence: The legal threat in crime control*. Chicago: University of Chicago Press.

Zingraff, Matthew T., Jeffrey Leiter, Kristen A. Myers, and Matthew C. Johnsen. 1993. Child maltreatment and youthful problem behavior. *Criminology* 31 (May): 173–202.

The Politics of Crime and Punishment

by William Lyons and Stuart Scheingold

The underlying thesis of this paper is that crime control policy is politically constructed. In developing our thesis and its implications, we depart from much of the conventional wisdom in three basic ways. First, in demonstrating the political derivations of crime control policy we reveal how, why, and to what extent criminological knowledge is marginalized in the policymaking process. Second, this paper takes issue with what is largely taken for granted by criminologists, criminal process professionals, and the general public as well: the pervasive attractions of a punitive discourse and punitive approaches to crime control. Finally, our exploration of the politics driving crime control policy reveals more complexity, contingency, and variation within the political process than most observers attribute to the politics of crime and punishment.

Many claim that the widespread drop in crime is directly and causally linked to zero-tolerance policing, to extraordinarily high rates of incarceration, to the increasing length of sentences, to harsh conditions of imprisonment, and to the return of capital punishment. Even if these claims are in part true, our counterclaim is that these putative benefits must be weighed against the oppressive costs of overwhelmingly punitive policies. Punitive policies are destructive in a number of ways that will be discussed in this paper—but principally in that

William Lyons is an Assistant Professor in the Department of Political Science at the University of Akron in Ohio. Stuart Scheingold is a Professor in the Political Science Department at the University of Washington in Seattle.

they have exacerbated racial cleavage and, in effect, are shattering communities in order to save them. We argue that regardless of whether or not punishment “works”—itself a contested proposition—it diverts attention, energy, and resources from strategic responses that recognize and respond to the complexity of the crime problem as it is revealed by social inquiry in general and criminological knowledge in particular.

The underlying thesis of this paper is that crime control policy is *politically constituted*: policy choices are driven by, and responsive to, prevailing values and interests rather than criminological knowledge. In developing our thesis and its implications, we depart from much of the conventional wisdom in three basic ways. First, in demonstrating that crime control policy is politically constituted we reveal how, why, and to what extent criminological findings are disregarded in the policymaking process. Second, this paper challenges what is largely taken for granted by criminologists, criminal process professionals, and the general public as well: the pervasive attractions of a punitive discourse and of punitive crime control policies. Finally, our exploration of the politics driving crime control policy reveals more complexity, contingency, and variation within the political process than most observers attribute to the politics of crime and punishment.

Many claim the widespread drop in crime is directly and causally linked to punitive policies—to zero-tolerance policing, to extraordinarily high rates of incarceration, to the increasing length of sentences, to harsh conditions of imprisonment, and to the return of capital punishment. To question, as we do, the advisability of a predominantly punitive policy agenda is not to claim that getting tough with criminals is inappropriate or ineffective. Instead, our objectives are to make the case for a more balanced policy agenda and to explore both the obstacles that stand in the way of balance and the opportunities for it.

Even if the most sweeping claims made on behalf of punitive approaches to crime control are valid, our counterclaim is that these putative benefits must be weighed against the destructive costs of overwhelmingly punitive policies. Punitive policies are destructive in a number of ways that will be discussed in this paper—but principally in that they have exacerbated racial cleavages and contributed to the decomposition of inner-city communities. The manifest costs of the punitive status quo include harming local communities, the broader American polity, and American justice. Less obvious, but equally as telling, are the opportunity costs that are incurred by a fixation on punishment.

For these reasons, we argue at the end of this paper for an approach to crime control that strikes a better balance between punishment and prevention on one hand and that deals with causes as well as symptoms on the other hand. Movement in that direction will be possible only if we understand why punishment has tended to crowd out alternative responses to crime. Perhaps the most telling finding that emerges from our inquiry is that the linkage between crime and the politics of crime and punishment is tenuous and contingent.¹ Research reveals that whether or not punishment works in strictly criminological terms—

Recent experience with the war on drugs, determinate sentencing, three strikes laws, and aggressive order maintenance policing all weaken the persuasiveness of the view that too little punishment is a threat to the social order while the costs of too much punishment are borne only by criminals.

whether or not punishment reduces crime—it serves a mix of other instrumental and expressive purposes. Exploring the configuration of the political, economic, social, and cultural forces that privilege punishment reveals that support for these “other purposes” varies among the relevant constituencies: local, State, and national political leaders; criminal process professionals; and various elements within the general public.

Thus, although the Nation has not stumbled into the punitive mode by accident—but rather in response to a complex convergence of values and interests—the arena in which the politics of crime and punishment play out is neither immutable nor uniform, and the punitive status quo is neither inevitable nor irretrievable. Historically, more enlightened policies have certainly been deployed and even today there are signs of more progressive penology—especially at the local level. If we can clarify the circumstances that sustain alternatives to punishment, the chances for reform will be enhanced—albeit hardly assured.

Punishment, Criminology, and Crime Control

Stated simply, prevailing justifications hold that imprisonment rates rise because crime rates rise and that rising prison rates will mean lower crime rates (Wilson 1985, 1991). This view contains two discrete, but not necessarily congruent, propositions—one political and the other criminological. The criminological claim is that punishment will actually reduce crime, whereas the political claim is that the punitive crime control policies are first and foremost a response to rising crime rates. Our reading of the available data raises serious questions about both of these generalizations and about the way they tend to be inextricably linked in so much of the public discourse about crime.

We will review the relevant data and decouple the criminological case for punishment from the largely separate question of why this polity has so enthusiastically embraced punitive policies. In sum, our criminological arguments, presented in this section of the paper, are that the crime control case for punishment is built on emphatically disputed terrain and should be balanced

against the heavy collateral damage that has been inflicted by a predominantly punitive approach to crime control. In the next section, we will turn more directly to the politics of punishment and argue that the choice to punish is driven by an extensive array of political, social, economic, and cultural forces that transcend, and are arguably unrelated to, the crime rate and criminal victimization.

The purpose of our review of the criminological findings in this section of the paper is, we repeat, *not* to claim that they conclusively demonstrate that punishment is ineffective or counterproductive. As we read these data, they do, however, cast grave doubt on what, in our judgment, amounts to an excessive reliance on punishment in recent years.

Many years ago, James Q. Wilson gave partial voice to a widely shared view that it is probably better to err on the side of too much, rather than too little, punishment: "If we try to make the penalties for crime swifter and more certain, and it should turn out that deterrence does not work, then all we have done is increase the risks facing persons who commit a crime" (1985, 144).

We strongly disagree. To err in the direction of too much punishment is to incur serious costs that extend beyond the burdens imposed on "persons who commit a crime." Recent experience with the war on drugs, determinate sentencing, three strikes laws, and aggressive order maintenance policing all weaken the persuasiveness of the view that too little punishment is a threat to the social order while the costs of too much punishment are borne only by criminals.² It is to the broader costs of punishment that we now turn.

Punishment as contested criminological terrain

The criminological community is, with some exceptions (Currie 1998),³ increasingly willing to acknowledge a substantial, even a dramatic, reduction in violent crime throughout the course of the 1990s. LaFree, for example, presents data that reveal marked decreases in both violent crimes and property crimes during the current decade (1998, 19–25). There is also general agreement that insofar as punishment has contributed to a reduction in crime, that contribution has come through deterrence and/or incapacitation. Punishment is said to deter crime by increasing its costs and, in this way, reducing the temptation to break the law. Clearly the success of deterrence is dependent, as is widely acknowledged, on offenders and would-be offenders making rational cost-benefit calculations before deciding to commit a crime. Incapacitation, it might be said, picks up where deterrence stops: For the nonrational and incorrigible, incarceration is the only way to prevent them from committing crimes. It is probably

also fair to say that criminologists would agree that the fear of punishment does deter some people from committing crimes and that incarceration does prevent some crimes from being committed.

This criminological consensus tends to break down, however, over what relationship, if any, there is between the punitive trajectory of crime control policies and the dramatic decrease in crime in the 1990s. James Q. Wilson, one of the leading proponents of punishment, recently claimed in the *New York Times* that “putting people in prison has been the single most important thing we’ve done to reduce crime” (Egan 1999). When Wilson published the first edition of *Thinking About Crime*, he saw deterrence as the primary mechanism through which punishment reduced crime. He stressed that deterrence was not dependent on the severity of the sanction, but rather on its certainty—and could indeed include both carrots and sticks (Wilson 1977, 194–204). In the revised edition of *Thinking About Crime*, published almost a decade later, Wilson incorporated incapacitation into his crime control policy agenda and made a strong case for the multiplier effect of incarcerating those likely to commit multiple offenses (Wilson 1985, 145–46). Because incapacitation is premised on keeping repeat offenders off of the streets for as long as possible, severity becomes the key to success—albeit as imposed solely on those who are, or are predicted to be, multiple offenders.

Although Wilson may well be the most prominent figure in the criminological debate, other leading criminologists challenged his claims. They question both the effectiveness of deterrence and incapacitation as tools of crime control and, more generally, the companion claim that incarceration explains the reductions in crime that have been recorded during the 1990s.

Michael Tonry traces the case *against* deterrence to the 1960s and 1970s. The 1967 President’s Commission on Law Enforcement and Administration of Justice, he tells us, failed to support deterrence, and the 1978 National Academy of Sciences Panel on Research on Deterrent and Incapacitative Effects concluded that they could not “assert that the evidence warrants an affirmative conclusion regarding deterrence” (Tonry 1995, 19). Additionally, Tonry stated:

[I]n 1993, after the most exhaustive and ambitious analysis of the subject ever undertaken, the National Academy of Sciences Panel on the Understanding and Control of Violent Behavior concluded that greatly increased use of imprisonment has had little effect on violent crime rates. . . . The clear weight of the evidence in every Western country indicates that tough penalties have little effect on crime rates. (1995, 19)⁴

Consider also Jeffrey Fagan’s study of recidivism among 6,800 individuals arrested on drug charges in New York City from 1983 to 1986. He found that “neither the prevalence nor the rates of recidivism were associated with sanction severity” (1994, 188). Instead, he argued that to the extent that there is a deterrent effect, it would vary with the labor market generally. His bottom-line finding is that “the marginal reduction in rearrest rates for those imprisoned, compared to probationers or those not sanctioned at all, suggests little utility in the widespread use of incarceration as a crime control measure for drug offenders” (1994, 205) (see exhibit 1).⁵

Zimring and Hawkins’ research in California leads them to be equally skeptical about the impact of incapacitation—particularly its effect on the *violent* crimes of homicide, assault, and robbery (1995, 126). Zimring and Hawkins also make a technical point that is particularly relevant to this era of escalating sentences. They explain that, assuming initial predictions about which offenders are likely

Exhibit 1. Percentage of those rearrested for five offense types by sanction severity (1 or more years at risk)

Sanction	Rearrest				
	Drug sale	Drug possession	Alcohol possession	Domestic violence	Other
Incarceration > 1 year (N=156)	14.1	15.4	10.3	9.0	41.0
Incarceration < 1 year (N=1,389)	18.4	26.3	12.4	22.3	56.0
Probation (N=551)	15.6	14.0	6.4	9.6	39.0
Fine continuation (N=2,293)	18.8	30.3	10.0	16.4	52.2
Dismissed/discharged (N=418)	23.4	23.4	9.8	17.0	49.5
Statistics					
X^2	13.47	46.26	16.53	56.76	91.32
<i>P</i>	.097	.000	.035	.000	.000
<i>Gamma</i>	.069	-.0002	-.059	-.047	-.006

Source: Fagan 1994, 202.

to commit multiple crimes are correct, the more or less indiscriminate incarceration of more and more offenders will be subject to the law of diminishing marginal utility (p. 50).⁶ It follows, as Currie argues, that at some point increasing incarceration will do more harm than good. "Our failure to match the increasing rates of imprisonment with corresponding increases in programs to reintegrate offenders into productive lives means that we are steadily producing ever-larger armies of ex-offenders whose chances of success in the legitimate world have been diminished by their prison experience. . . ." (1998, 30). Nor can incapacitation prevent the nearly immediate replacement of incarcerated drug dealers by other dealers on the street.⁷

It might seem, at least at first glance, that national data belie these arguments against punishment. After all, the prison population in the United States doubled from 1982 to 1992, while the Bureau of Justice Statistics reported that in 1992 victimization continued a decade-long decline and personal crime dropped 26 percent from 1973 to 1990. Savelsberg (1994, 919–920), however, claims that this linkage is more apparent than real:

[W]hile increasing punishment in combination with stabilizing crime rates could be perceived as a rational deterrence response, such an interpretation prompts considerable doubt. First, the steepest and steadiest increase in incarceration rates began in 1980, when the crime rate had already been leveling out during the preceding four years. Second, the incarceration rate increased by more than 50 inmates per 100,000 population between 1980 and 1984 without resulting in any change in the crime rate. In the following years (1984–1989) the incarceration rate grew by an additional 50 again without achieving any change in crime rates. Since 1989 the increase in incarceration rate has again been 50, as in the two preceding five-year periods, without changing the trend in crime rates but at considerable expense in times of a sluggish economy, declining budgets, and an eroding public infrastructure.

Thus there are many reasons to be dubious about the privileging of punishment in U.S. crime control policy.

Of late, even longtime conservative supporters of punishment as crime control seem to be reconsidering their position (see Davey 1998, 107). Tonry (1995, 119) tells us that Wilson himself seems to be persuaded that, at least with respect to drugs, we have reached the point of diminishing returns:

After surveying research and experience through 1990, James Q. Wilson, for two decades the country's leading conservative scholar of crime control policy and research, concluded that "significant reductions in drug use will come only from reducing demand for those drugs . . . the marginal product

of further investment in supply reduction is likely to be small.” He reports “that I know of no serious law-enforcement official who disagrees with this conclusion. Typically, police officials tell interviewers that they are fighting a losing war or, at best, a holding action.”

According to an article in the *New York Times*, national drug czar Gen. Barry McCaffrey has come to much the same conclusion—namely that “we can’t incarcerate our way out of the problem” and that drug treatment programs would be more effective and would save a great deal of money (Egan 1999). Note similarly that Margaret Thatcher’s conservative government, in a 1990 white paper, concluded that although deterrence was “a principle with much immediate appeal,” it was “unrealistic” to assume criminals were rational calculators when the evidence showed that crime was more impulsive. Canada, under the conservative government of Brian Mulroney, in a 1993 report proposed moving away from deterrence and toward prevention (Tonry 1995, 19).

Although there are, in sum, good reasons to be dubious about the effect of punishment on crime, our core claim is that, whether or not punishment actually works as an instrument of crime control, the Nation pays a heavy price for privileging punitive crime control policies. It is to these costs that we now turn.⁸

The costs of punishment

To fully appreciate the costs of punitive policies, it is necessary to factor in some aspects of the prevailing policy matrix that are not, strictly speaking, punitive. Feeley and Simon (1992) call attention to a “new penology” with an extensive impact on politics and culture in the United States. As they see it, the key is not just that sentences are getting longer and punishment practices are becoming harsher and more unforgiving; more insidiously, the United States is confronting crime by an array of public-sector and private-sector *risk reduction* policies. This approach, which Diana Gordon (1994) has dubbed “the return of the dangerous classes” and Mike Davis (1990) has portrayed in his exposé of “fortress LA,” puts the emphasis on managing crime by using risk profiles to insulate the law-abiding from the lawbreakers.

This new penology thus fuels, and is fueled by, suspicion and stereotyping that are turning Americans against one another. Among the relevant policies is target hardening, which ranges from putting identification numbers on personal property and creating neighborhood watch groups through using a bewildering variety of home, office, automobile, and personal security devices to building gated communities that literally wall off portions of society from one another. There are also more proactive versions of the new penology. These include offender profiling by street cops, highway patrolmen, and officials monitoring

airports or border crossings. Then there are the street cameras, zero-tolerance policing, and the ever-more pervasive presence of metal detectors.

The impact of these policies, while falling most heavily on the marginalized, is diffuse and indiscriminate—altering the nature of society for everyone (Cohen 1985; Feeley and Simon 1992). The energy and resources of the new penology are introduced preemptively and premised on a sense of imminent danger from a criminal element beyond redemption and rehabilitation. Further, the state enlists the citizenry to participate actively in law enforcement (neighborhood watch) and in risk reduction (home security) and to accept without question intrusive interference (e.g., metal detectors) with everyday activities.

Retreat from criminal justice and the rule of law

Elements of this new penology are clearly at odds with the core values embodied in American justice. Gordon (1990, 16–35) notes the weakening of *Miranda* protections and the exclusionary rule, the expanding use of preventive detention, and the enormous increases in spending on criminal justice hastened by the punitive response to crack cocaine. For Gordon, these protections define our longstanding commitment to limited government, a commitment that is quietly eroding in the face of an expanding and interventionist “justice juggernaut.” These trends ought to concern us, she says:

[B]ecause the procedural protections of criminal law are emblematic of this society’s commitment to limits in the state’s authority over the citizen. . . . The rights of defendants are also the rights of students, employees, tenants, and everyone else who is ever in a position to be coerced by the exercise of government power over individuals. (p. 35)

It might be argued that Gordon and those who share her views of current developments are simply disappointed liberals complaining about the conservative shift in law enforcement—but there is more to the story than that.

Such developments seriously erode the common ground of criminal *justice* in the United States—common ground that, as Herbert Packer wrote many years ago, has united “due process” liberals and “crime control” conservatives. At the heart of this common ground are *ex post facto* restrictions requiring that law enforcement and the criminal process begin with a clear delineation of the conduct proscribed as criminal. In other words, “the criminal process ordinarily ought to be invoked by those charged with the responsibility for doing so, only when it appears that a crime has been committed and when there is a reasonable prospect of apprehending and convicting its perpetrator” (Packer 1968, 155).⁹ All of this is put at risk by a new penology that anticipates criminal activity, acts on the probability that it is forthcoming, and targets *groups* of people. Although

the state is implicated in, and influenced by, these repressive developments, these developments also play out at other sites of social control—the family, the workplace, and the community (Cohen 1985; Gilliom 1996; Garland 1996).

Weakening of inner-city families and communities

Christopher Stone of the Vera Institute noted that prisons are “factories for crime” (as cited in Schlosser 1998); increases in gang violence in our cities can be linked to the networking, recruiting, and leadership opportunities provided to gangs by incarceration. Blumstein, as we noted earlier, makes the same point in calling attention to the postrelease downside of incapacitation (1998, 133). But Stone’s argument goes beyond the specifically criminogenic drawbacks of extensive incarceration. “[T]he culture of the prisons, he claims, is rapidly becoming the culture of the streets” (as cited in Schlosser 1998, 77). Michael Tonry (1995, 6–7) puts this broader point as follows:

Particularly since 1980, the effects of crime control policies have been a major contributor to declining levels of lawful employment by young black males. The extraordinary levels of black male involvement with the justice system . . . are a serious impediment to the achievement of welfare policy goals. . . . No solution to the problems of the urban underclass . . . can succeed if young men are not part of it. The crime problem is no longer simply a criminal justice concern. Unless America can devise ways to make its crime control policies less destructive of poor black males and poor black communities, there can be no solution to the problems of the black underclass.

Meares and Kahan make a similar point about the impact of proactive policing that focuses on “the incarceration of geographically concentrated, low-level dealers inevitably lead[ing] to family disruption, unemployment, and low economic status—all of which create social *disorganization*” (1998, 813; italics in original). The underlying point is that there is a mutually reinforcing relationship between the incarceration of so large a proportion of African-American

In addition to the social and fiscal burdens of a largely punitive and risk-averse crime control regime, these policies and practices also have had a corrupting, albeit difficult to measure, impact on how we think about the nature of crime and crime control, and on political discourse more generally. The result is to impoverish public debate not only over crime and crime control but over the nature and condition of the social contract.

males, the declining formal and informal control in communities, and the rise of “no-go” areas that has been noted in the inner city (Dahrendorf 1985).

Contemporary prison construction and sentencing reform reveal a parallel problem of the *opportunity* costs of punitive policies. “Today the United States has approximately 1.8 million people behind bars . . . more people than any other country in the world” at a cost of approximately \$35 billion a year (Schlosser 1998, 53–54). This reflects a choice to invest in a redistribution of resources not only from other segments of the criminal justice system but also from inner-city schools to rural prisons (Schlosser 1998). Beckett (1997, 106) stated:

Between 1976 and 1989, the percentage of state budgets allocated to education and welfare programs declined dramatically—the former by 12% and the latter by 41%. Across the states, the average monthly welfare benefit shrank from \$714 to \$394 (in 1995 dollars) between 1979 and 1993. . . . Meanwhile, state and federal “correctional” expenditures grew by 95% and 114% (respectively) between 1976 and 1989 and continue to increase dramatically.

The budgetary impacts of these investment decisions were also apparent at the Federal level as a result of the Reagan administration’s war on drugs. From 1981 to 1991, Federal Bureau of Investigation antidrug funding increased from \$8 million to \$181 million, Drug Enforcement Administration funding increased from \$86 million to \$1,026 million, and Department of Defense antidrug funding grew from \$33 million to \$1,042 million (Beckett 1997, 123, note 36). At the same time, funding for the National Institute on Drug Abuse was cut from \$274 million to \$57 million (1981–84) and Department of Education antidrug funding dropped from only \$14 million to a mere \$3 million (Beckett 1997, 53).

Deterioration of political discourse

In addition to the social and fiscal burdens of a largely punitive and risk-averse crime control regime, these policies and practices also have had a corrupting, albeit difficult to measure, impact on how we think about the nature of crime and crime control, and on political discourse more generally. The result is to impoverish public debate not only over crime and crime control but over the nature and condition of the social contract.

Thus, current patterns for investing public dollars seem to reflect what Tonry (1995) tellingly refers to as “malign neglect”: political indifference and/or obliviousness to the decimation of a generation and to the centrifugal forces that are dividing the Nation against itself. Similarly, Sampson and Bartusch (1998) argue that our current law enforcement practices are part of a broader range of social policies that add to the disproportionate burdens borne by those who live in

neighborhoods of concentrated disadvantage. As they see it, escalating imprisonment rates, more intensive surveillance, less available health care, deteriorating inner-city schools, and more aggressive police practices all add to the ordeal of families and communities already most victimized by crime.

Currie (1998, 6) calls attention to the failure of political leaders to address these broader issues and, in so doing, to settle for, and contribute to, an impoverished political discourse:

Neither presidential candidate in 1996 spoke to the issues raised by the mushrooming of America's prisons or offered an articulate response to the crisis of violence among American youth. Instead, the candidates reached for the most symbolic and least consequential issues: both Clinton and Dole, for example, supported the extension of the death penalty, along with a vague call for "victims' rights," boot camps, and school uniforms. . . . The political debate, such as it is, has become increasingly primitive and detached from what we know about the roots of crime and the uses and limits of punishment.

In other words, candidates tend to ignore crime prevention and job creation while their fixation with punishment leaves people confused and "continually bombarded with the myths, misconceptions, and half-truths that dominate public discussion, while the real story is often buried in a specialized technical literature" (Currie 1998, 6-7) or obscured by circumlocutions central to law enforcement (Klockars 1988).

The history of crack is one example of how disinformation impoverishes public debate and has a destructive impact on those communities most victimized by crime. According to a *New York Times* article, crack struck fear in American society, but crack use fell long before harsh penalties were imposed, leaving a legacy of continued drug use, harsh penalties, crowded prisons, aggressive policing of minor disorders, and diminished respect for fairness in the criminal justice system. "Crack prompted the nation to rewrite its drug laws, lock up a record number of people and shift money from schools to prisons. It transformed police work, hospitals, parental rights, and courts. Crack also changed the racial makeup of American prisons. . . . But the harsh laws responding to crack have not reduced overall drug use" (Egan 1999).

Taken together, the costs of our punitive and preemptive campaign against crime are socially and politically disabling. Even if the crime control case for these policies was stronger than we believe it to be, this would be dubious public policy at best. How then is the dogged adherence to a punitive policy agenda to be explained? For us, as the title of this article clearly suggests, the explanation is political.

The Political Construction of Crime and Punishment

A substantial, and in our view convincing, body of data indicates that the politics of crime and punishment are a classic instance of what Murray Edelman (1977) refers to as “words that succeed and policies that fail.” Winning and holding public office, not crime control, are driving the policymaking process. And in politics, as Katherine Beckett (1997) has put it, “crime pays”—at least insofar as it becomes the occasion for a punitive political discourse and for punitive policy initiatives (Scheingold 1984, 71).

But why, how, and for whom do punitively inflected politics of crime and punishment pay? Just what are the political calculations that lead toward punitive policies? Our answer to these questions diverges sharply from the views of both the liberal and conservative mainstream. According to the mainstream commentators, the politics of crime and punishment are, for better (the conservative position: Wilson 1985) or worse (the liberal position: Windlesham 1998), driven *from below* by aroused citizens. In contrast, nonmainstream critics are inclined to attribute the politics of crime and punishment to the more or less conscious efforts of powerful elites to preserve the prevailing hegemony (Quinney 1980 and Hall et al. 1978).

To our way of thinking, these narratives at best tell only part of the story and at worst lead us astray in significant ways. Our reading of the data indicates that punitive policies are driven from above as well as from below. The *top-down* explanations are much closer to the mark and, at the very least, provide insightful correctives to the *bottom-up* mainstream narratives. Political leaders are not, however, free agents in this process. And although there is a punitive impulse from below, it is neither as insistent nor as decisive as the conventional wisdom suggests. Finally, the available data fail to establish a reliable association between crime, fear of crime, or criminal victimization and either punitive initiatives from above or punitive impulses from below. Instead, the politics of punishment draw sustenance from other more fundamental problems—many of which might reasonably be seen as root causes of crime.

All of this will be explored in more detail. For the time being, suffice it to say that our analysis leads to a more complex, multilayered, and interactive vision of the politics of crime and punishment than emerges from either the top-down or the bottom-up accounts. We also want to underscore the centrality of empirical evidence in our account and, thus, the sharp contrast between it and the impressionistic narratives dominating so much of public and criminological discourse on these political issues. As one of us has written elsewhere, “criminologists tend to think of the political side of things, when they think of it at

all, as both too simple and too elusive to warrant their attention” (Scheingold 1998, 860). Take, for example, the undocumented assertion of the otherwise scrupulously precise criminologist Alfred Blumstein:

It is clear that in the current era, where the political expediency of indulging the public’s intense concern about crime is sufficiently attractive and the political risk of failing to do so and being labeled “soft on crime” is sufficiently frightening—the role of research findings in the public policy arena does seem largely to have been put aside, though only temporarily one would hope. (1997, 359; italics added)

We are, of course, in complete agreement with Blumstein concerning the wide gap between criminological knowledge and crime control policy. But we take issue with Blumstein attributing punitive policies to “the public’s intense concern about crime.” We are not alone in calling attention to the constitutive contribution of politics to crime control policy, and the work of these political criminologists figures prominently in the analysis that follows.

Decoupling the politics of punishment from crime

Over the years, the substantial body of data generated in the United States has failed to establish the associations that might reasonably be expected between crime rates, on one hand, and fear of crime, punitive public attitudes, and incarceration rates on the other (Scheingold 1984, 38–49). Similarly, Tonry reprinted a U.S. Department of Justice table that indicates a lack of association between crime and incarceration rates (see exhibit 2).

Christie has found the same disassociation between incarceration and crime rates in a variety of countries in Eastern and Western Europe as well as in the United States—including, for example, Norway, Finland, and the Netherlands (1994, 22–33).

Beckett (1997, 28–44) and Savelsberg (forthcoming) interpret this disconnection between crime rates and a variety of political variables as an indication that public concern about crime follows rather than precedes punitive political initiatives like the war on drugs (see exhibits 3 and 4). According to this way of looking at things, crime control policy cannot properly be thought of as democracy at work. Political leaders simply do not seem to be responding to a frightened, victimized, and punitive public (Scheingold 1984, 49–54).

It seems much closer to the mark to think of punitive policies as starting at the top, so to speak, and being driven by the electoral needs of political leaders—rather than by either the crime rate or by public clamor. This is not to say that

Exhibit 2. Crime and incarceration rates, State and Federal prisons, 1960–90 (per 100,000 population)

	All crimes	Violent crimes	Incarceration
1960	1,887	161	117
1965	2,449	200	108
% change 1960–65	+30	+24	-8
1970	3,985	364	96
% change 1965–70	+63	+82	-11
1975	5,282	482	111
% change 1970–75	+33	+32	+16
1980	5,950	597	138
% change 1975–80	+13	+24	+24
1985	5,206	556	200
% change 1980–85	-13	-7	+45
1990	5,820	732	292
% change 1985–90	+12	+32	+46

Note: From William P. Barr, 1992, *The Case for More Incarceration*, Washington, D.C.: U.S. Department of Justice, Office of Policy Development, table 2; U.S. Department of Justice, Federal Bureau of Investigation, Uniform Crime Reports, various years; U.S. Department of Justice, Bureau of Justice Statistics, *Prisoners in America*, various years. Data presented in boldface not provided in *The Case for More Incarceration*.

Source: Tonry 1995, 23.

punitive policies are simply imposed on an acquiescent and disinterested public. Instead, the politics of crime and punishment emerge out of complex and reciprocal interactions mediated by a variety of values and institutions—most prominently via the media (Scheingold 1991, 172–192).

Consider, for example, the Savelsberg finding of, and explanation for, much higher incarceration rates in the United States than in Germany. He notes that “[n]either the German nor the American patterns are directly associated with changing crime rates” (Savelsberg 1994, 916). Whatever the linkage between crime rates and incarceration, Savelsberg argues that it must be seen as “mediated in complex ways by many factors” (p. 920), including the institutions and practices a nation-state selects for its criminal justice systems and the cultural resonance of punitive crime control messages. We will return to these intricate interactions shortly, but first we want to present further evidence of the disjunction between crime rates and the politics of punishment.

Consider the *negative* correlation between crime rates and imprisonment discovered by Davey (1998) in his bivariate correlations for all 50 States for the period

Exhibit 3. Correlation of the crime rate, media coverage, and political initiative with public concern about crime, 1964–74

Explanatory variables	Dependent variable: Public concern about crime, 3–4 months		
	1964–74	1964–74	1964–74
Crime rate	-.0077 (.011)	-.0067 (.013)	-.005 (.022)
Media initiative	1.2504* (.5547)	1.3103** (.497)	1.2107* (.5372)
Political initiative	1.3711** (.3509)	1.3511** (.3364)	1.2721** (.3409)
Adjusted R ²	.5649	.5866	.5712

* $p < .05$
 ** $p < .01$
 Source: Beckett 1997, 21.

1972–1992. He also ran a multiple regression analysis including socioeconomic, racial, and demographic variables and found that neither crime rates nor these other variables accounted for all of the variance in imprisonment rates. Finally, Davey selected six matched pairs of adjacent States, where one State had among the eight highest increases and the other among the eight lowest increases in imprisonment. Neither crime rates nor socioeconomic factors entirely accounted for the dramatic differences in imprisonment across these otherwise similar States.

The differences arose, Davey suggested, from gubernatorial values. States led by law-and-order governors experienced sharp increases in imprisonment rates. Adjacent States with more moderate governors avoided an incarceration explosion. For example:

- From 1989 to 1993, Judd Gregg served as Governor of New Hampshire. In that period, the State’s prison population increased from 103 to 157 per 100,000, while the crime rate fell 12 percent. Governor Gregg used deep cuts in State support for education to finance the increases in the imprisonment costs. He revised sentencing laws to keep young offenders in prison longer for more minor offenses and encouraged judges to get tough on crime. In addition, he expanded funding for drug enforcement while “New

Exhibit 4. Political initiatives and public concern about crime and drugs

	Political initiatives (above date line)				Public concern (below date line)			
Case 1		.25	.52	1.03		.31		
Crime (January 1968– January 1969)	1/68 → 8%	4/68 → 10%	7/68 → 13%	10/68 → 15%	1/69			
Case 2		.37	.50	.77		.50		
Crime (May 1969– January 1971)	5/69 → 8%	1/70 → 12%	5/70 → 12%	10/70 → 22%	2/71			
Case 3		.38	.53	1.4		.83		
Drugs (September 1988–December 1989)	9/88 → 15%	1/89 → 11%	5/89 → 27%	9/89 → 64%	1/90			
Case 4		.24	.42	1.01		.19		
Drugs (January 1986– January 1987)	1/86 → 1%	4/86 → 3%	7/86 → 8%	10/86 → 11%	1/87			

Source: Beckett 1997, 14.

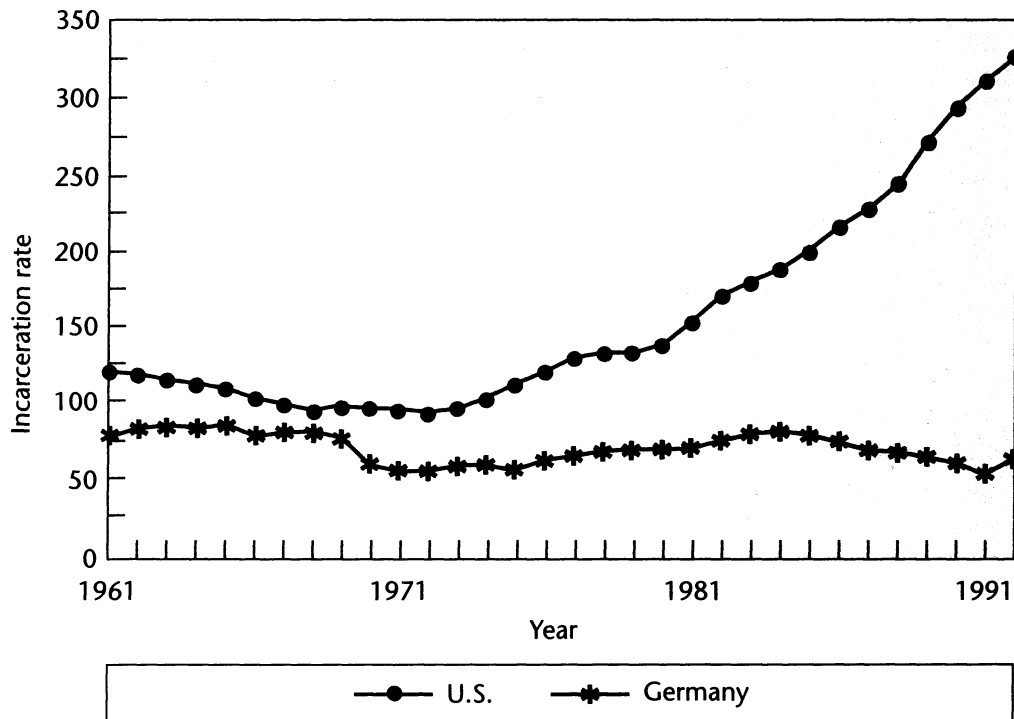
Hampshire prisons lacked the funds to provide any kind of drug and alcohol treatment” (Davey 1998, 52–53).

- For the same period in Maine—a State with another Republican Governor, John McKernan, a similar socioeconomic profile, and crime rates that also fell 11 percent—the prison population did not change.

Davey explains that what distinguished the two States was that Gregg was a law-and-order governor while McKernan took the “direct opposite” position—supporting gun control, for example, even though it was “not popular in rural Maine” (p. 54–55). Davey concludes that crime and punishment become public obsessions through “the political exploitation of public confusion and the fear of crime” (p. 48).

Of course, Davey’s conclusion begs the question of how and why States with similar cultures and demographics elect such differently situated governors.¹⁰ Although we do not directly address this puzzle, our analysis moves in that direction. We combine *macroanalytic* and *microanalytic* accounts of the politics of crime and punishment. The macroanalytic accounts attribute punitively inflected policies to structural failings of the liberal state. The microanalytic

Exhibit 5. Trends in incarceration rates in the United States and the Federal Republic of Germany, 1961–92



Note: For the United States, the incarceration rate is for prisoners sentenced to more than 1 year under the jurisdiction of State or Federal correctional authorities between 1961 and 1992 (see Cahalan 1986; U.S. Department of Justice 1990b, 1992a; figs. for 1992 are estimated). The incarceration rate (Gefangenziffer) in Germany is based on Statistisches Bundesamt (1977, 1991; figs. for 1992 are estimated).

Source: Savelsberg 1994, 917.

accounts look directly at the policymaking processes at different levels of government. These accounts are not mutually exclusive; each makes meaningful contributions to our understanding of the politics of crime and punishment.

Punishment, governance, and the decline of the liberal state

Most broadly conceived, the punitive binge of recent years has been attributed to the inability of the liberal state to live up to its own ideals.¹¹ This broader vision is articulated in related but distinctive and not necessarily compatible ways in the works of Simon (1997, 1995), Garland (1996), Melossi (1993), and Christie (1994). For them, a postliberal state unable to maintain the economic and social conditions minimizing crime and maximizing the well-being of the society as a whole turns to punitive responses to crime. Incapable of building a

truly inclusive society and thus vulnerable to various kinds of disorder, the state turns to punishment, exclusion, and the “new penology” to maintain power and reinforce the prevailing hegemony. In the words of Jonathan Simon (1997), this amounts to “governance through crime.” Although there is general agreement that the politics of crime and punishment are a direct reflection of the problems of the liberal state, the diagnoses diverge sharply.

Both Christie and Garland see the imposition of punitive crime control strategies as a more or less direct response to unacceptable levels of crime leading to, and resulting from, a transformation of consciousness. According to Christie (1994, 23–24):

[We] are in a situation where the old defenses against committing unwanted acts are gone, while new technical forms of control have been created. God and neighbors have been replaced by the mechanical efficiency of modern forms of surveillance. We live in a concrete situation with crime as a mass-phenomenon. Here anger and anxieties [associated with crime] . . . become the driving force in the fight against *all* sorts of deplorable acts.

Garland (1996, 446) states:

Despite the fact that crime has an uneven social distribution, and that high risk victimization is very much a pocketed, concentrated phenomenon, crime is widely experienced as a prominent fact of modern life. For most people, crime is no longer an aberration or an unexpected, abnormal event. Instead, the threat of crime has become a routine part of modern consciousness, an everyday risk. . . . My claim is that the normality of high crime rates in late modern society has prompted a series of transformations in official perceptions of crime, in criminological discourse, in modes of governmental action, and in the structure of criminal justice organizations.

In this scenario, elites deploy and play on the fear of crime to encourage acquiescence to the concentration of violence in the state. State violence can then be separated from the moral constraints constitutive of community life by encouraging the perception of “even minor transgressions of laws as crimes and their actors as criminals” (Christie 1994, 23–24).

Crime figures much less prominently in Melossi’s analysis tracing punitive policies to the economic downturn of the 1970s:

Abruptly, after 1973 the rate of growth in *real* weekly earnings dropped. From a 1973 peak of \$327.45 in constant (1982–84) dollars, *real* weekly earnings slipped to \$276.95 during the 1982 recession. In spite of the recovery and the long expansion of the 1980s they continued to fall to \$264.76

in 1990. Thus seventeen years after . . . and in spite of the vaunted prosperity of the Reagan years, the real weekly income of the worker in 1990 was 19.1 percent *below* the level reached in 1973! (Peterson 1991, 30)

As working conditions became more onerous, Melossi argues, elites used the threat of punishment as a “social whip” to maintain discipline within an increasingly alienated workforce. At the same time, views about economic adversity shifted. Rather than acknowledging its structural sources, criminologists, politicians, and other opinionmakers directed attention to crime and criminals, and, in so doing, nurtured a “climate of social disciplining” (Melossi 1993, 266).¹² For Melossi, this reframing is better understood as a reassertion of hegemonic discipline than as effective crime control—as a way of directing attention away from a redistribution of income leading to more class inequality and poverty.

Clearly, Melossi points to a broader crisis in the authority of the liberal state—one that transcends crime. The breadth of Melossi’s analysis lends weight to Simon’s “governing through crime” thesis. Melossi moves beyond crime to challenges to political authority posed not only by the excluded underclass but also by the discontents among the working poor and other portions of the working and middle classes. Melossi’s analysis also seems more compatible with data, already presented, that decouples crime rates from the politics of crime and punishment. Finally, the broader vision is more compatible with data showing how punitive preferences are more closely linked to a loss of status and sense of material deprivation than to fear of crime or victimization.

But whatever the nature and sources of these threats to the liberal state, there is general agreement that they result in punitive policies diverting resources from social and economic policy to the agencies of the criminal justice system. In addition, there is evidence that once under way, these policies generate their own momentum, driven by increasingly entrenched vested interests. Crime control is, after all, a big business (Christie 1994) and a huge job creation program (Schlosser 1998).

Schlosser (1998, 54) argues that decisions to invest in punishment and the prison construction frenzy that followed are evidence of:

But whatever the nature and sources of these threats to the liberal state, there is general agreement that they result in punitive policies diverting resources from social and economic policy to the agencies of the criminal justice system.

[a] prison-industrial complex—a set of bureaucratic, political, and economic interests that encourage spending on imprisonment, regardless of the actual need. The prison-industrial complex is not a conspiracy. . . . It is a confluence of special interests. . . . [C]omposed of politicians, both liberal and conservative, who have used the fear of crime to gain votes; impoverished rural areas where prisons have become a cornerstone of economic development; private companies that regard the roughly \$35 billion spent each year on corrections not as a burden on American taxpayers but as a lucrative market; and government officials whose fiefdoms have expanded along with the inmate populations.

In other words, not only is crime control inescapably sculpted within ongoing political struggles, but, in addition, the outcomes impact jobs, community, and citizenship.

From the macroanalytic perspective, then, there is a great deal at stake. To acknowledge that punitive crime control policy has failed, “would call into

question not just the crime policies themselves but the success—and the humanity—of the vision as a whole” (Currie 1998, 8). It also would challenge the distribution of full employment, private-sector profits, and a widely accepted and comforting understanding of how to make sense of our social problems. This understanding is anchored in a dramatic and compelling “myth of crime and punishment” that conveys the dual message of acute criminality and of the crime control capabilities of professional law enforcement practices (Scheingold 1984, 60–75).

At the same time, the macroanalytic, high-stakes politics of crime control, as identified by Garland, Christie, Melossi, and Simon coexist with, and are qualified by, a lower stakes political game. That

political game is more fluid and adaptable. We now turn to this perspective with its potential for reform.

Broadly speaking, crime control policies in urban jurisdictions with the most crime tend to be distinctly less punitive than those developed by the Federal and State governments.

Punishment, politics, and contingency within the liberal state

From the macroanalytic perspective, the politics of crime and punishment may well be about the form and future of the liberal state. Another story needs to be told, however, about the interior politics of the liberal state. This story reveals a multilayered, fluid, less deterministic side of the politics of crime and punishment. Although these two perspectives are in tension with one another, they

are not mutually exclusive. We seek to understand how they interact and, in so doing, to illuminate both the opportunities for, and the constraints on, reform of the emergent punitive state. By exploring and explaining the imposing variation that divides the general public and political elites on punitive approaches to crime control, we lay the foundation for examining reform.

National and State politics: Campaigning on punishment

It might be expected that reactions to crime by both the public and policymakers would vary directly with their proximity to crime, but this is not the case. Instead, insofar as there is a relationship, it is not direct but inverse. Consider, to begin with, the *fear of crime*:

Research on fear of crime—the emotional response to possible violent crime and physical harm—began some 20 years ago with the idea that fear reflects the possibility of victimization. This notion foundered on two repeated findings: (1) fear levels do not closely reflect local crime rates when social class is removed from the relationship . . . and (2) fear levels of age-sex groupings are inversely related to their victimization rates. (Covington and Taylor 1991, 231)

For example, young males tend to be more victimized but less fearful while the elderly and women are less likely to be victimized but more fearful. The incongruities compound when we turn to *punitive attitudes* that do not seem to be associated with *either* victimization or fear. Thus, women are more fearful but less punitive (Scheingold 1984, 47–48). Most telling perhaps is the so-called “rural hunting culture” of white males in nonurban settings who are less victimized and less frightened but more punitive (Stinchcombe et al. 1980).

What is true of public attitudes is also reflected in policy. Broadly speaking, crime control policies in urban jurisdictions with the most crime tend to be distinctly less punitive than those developed by the Federal and State governments. These outcomes are generally consistent with the distribution of public attitudes. Since urbanites are the most ambivalent about punishment, it stands to reason that urban political elites would court controversy by politicizing crime and would simultaneously be more receptive to nonpunitive policies. Conversely, as the skeptical urban constituency is diluted at the State and Federal levels, the influence of the more distant and punitive publics probably increases. But how do we explain the underlying discrepancy between distance from and attitudes toward crime and punishment? Punitive attitudes are driven by expressive rather than instrumental motivations. Ellsworth and Gross (1994) report that respondents who support the death penalty do not necessarily believe in it as a crime control technique; nor, for that matter, does support

decrease as crime stabilizes or falls. These findings led Ellsworth and Gross to conclude that support for the death penalty is largely moral and absolute—expressive rather than instrumental: “Research suggests that fear is not the driving emotion. Future research should focus on other emotions, particularly frustration and anger. Anger is the most positive of the negative emotions, because it is the only one that confers a sense of power” (p. 45).

Note that Ellsworth and Gross mention frustration and anger but not specifically frustration and anger about crime.

The link between punitive attitudes and crime is further attenuated by data generated in Tyler and Boeckmann’s (1997) study of “three strikes” legislation. They found both strong public support for a California “three strikes and you’re out” initiative and reasons why that support cannot be taken at face value. Enthusiasm for the punitive three-strikes approach to crime control, it turned out, could not be traced directly to public reactions against crime but rather to public reactions against a rather amorphous sense that “social conditions” and “underlying social values” have become too precarious (p. 255). In short, those citizens who feel that the moral and social cohesion that holds society together is declining are more supportive of punitive public policies (p. 258).

Although crime may well be one indicator of social malaise, there are of course many others. Consider the unsettling *social* upheavals that this society has experienced in recent decades, the so-called “culture wars” (Hunter 1991) arising from challenges to established hierarchies along race and gender lines, and the struggle between secular and religious values. Consider also the neoliberal reconfiguration of the American economy with reduced job security, increased material inequality, and a weakened social safety net. Many Americans have, in short, been working harder but earning less in jobs that may be temporary and/or insecure.

Given this context, crime can serve as a condensation symbol—a vehicle for channeling other deeply felt concerns about society into amplified fears of crime (Melossi 1993; King 1989; Hall et al. 1978; Beckett 1997). For a host of reasons, those in distress might displace their anxieties onto crime—even if they themselves were not threatened by it. Kathlyn Gaubatz’s research on “crime in the public mind” leads her to conclude that criminals are among the last socially acceptable targets for venting our anger and resentments in an increasingly tolerant society and thus our “insufficiently actualized negative feelings” are eagerly and resolutely directed at them.

Many Americans have decided to tolerate behavior which they nevertheless find bothersome. Thus they go about their lives, still carrying the burden of feeling that their fellow citizens are engaging in activities which

are somehow distasteful, unnatural, sinful, dangerous, immoral, or uppity. But they choose not to release that psychological burden into advocacy of prohibitions on these activities. . . . [As a result, they have been] developing a pool of insufficiently actualized negative feelings, and . . . they [have] needed some place to put them. What better place than in strenuous opposition to the acts of criminal offenders? (1995, 162)¹³

Moreover, in contrast to the readily acknowledged complexity of economic, social, and cultural problems, taking a bite out of crime seems like a rather straightforward proposition. These simple truths about crime and punishment are readily accessible as common sense (Scheingold 1991, 4–7), although the available data lead in unequivocally counterintuitive directions.

There are also reasons why an expressive reaction to crime, generated at a distance from it to displace a broader malaise, would privilege punishment—regardless of beliefs about punishment’s effectiveness. If, for example, the public turns to matters of crime and punishment in reaction to hard-to-grasp economic problems or to objectionable social and cultural changes, punishment tends to become an end in itself. As Ellsworth and Gross put it in connection with their research on support for the death penalty:

It is not hard to understand why many people support capital punishment even though they believe it does not deter crime and is not fair. The death penalty is concrete, it is forceful, and it is final (which nothing else seems to be); it is *something*, and being for it means that you insist that *something* be done. (1994, 42; italics in the original)

In short, the anxieties associated with unwelcome social, economic, and cultural transformations generate anger, and punishment becomes a vehicle for expressing that anger. Conversely, more permissive responses to crime are less likely to discharge anger and anxiety than to compound them.

It stands to reason that if we turn to the world of crime and punishment for solace, we are unlikely to be receptive to the messages of enlightened liberalism. We do not want to hear that we are all responsible or that there is no definitive solution to the problems of crime, nor that we should turn the other cheek. (Scheingold 1984, 71)

The problem with this vague message is that it imports into the world of crime and punishment the same sense of futility we are fleeing and also forecloses the opportunity to express anger.

Politicians are attracted to punishment in part because their constituents are attracted to it. Politicians are, of course, always in search of campaign issues. Valence (largely symbolic and expressive) issues, like anticommunism, for

example, are particularly attractive in that they unite sizable majorities. The only challenge with respect to valence issues is to present them in ways that work for you and against your opponent. Certainly in presidential politics, street

Proximity does not make people less concerned about crime. On the contrary, those closest to crime tend to be less punitive, in large part, precisely because they have a real, rather than a symbolic, stake in effective crime control strategies.

crime has frequently served as an effective valence issue, especially for conservative Republicans. Not only is there overwhelming agreement that street crime should be reduced, it has the added attraction of arousing strong emotions—something capable of gaining a firm grip on the public imagination (Scheingold 1984, 68). Much the same seems to be true at the State level—going back to the 1960s. Indeed, Ronald Reagan's 1966 law-and-order campaign for Governor set the tone for much of what was to follow in presidential politics (Berk, Brackman, and Lesser 1977, 59). More broadly, the California legislature seemed inclined to invoke criminal law indiscriminately. "[T]he almost universal response to a wide spectrum of perceived social problems was increased criminalization" (p. 300).

This does not mean, however, that politicians are simply responding to the demands of their constituents, as many argue. On the contrary, politicians have their own

reasons for stoking the punitive fires. Street criminals, who are objectionable in their own right, are also serviceable surrogates for displacing other discontents. Accordingly, campaigning on crime provides politicians with an opportunity to divert the public's attention to crime and away from underlying social, economic, and cultural problems. Dealing with these latter issues (e.g., reducing inequality, enhancing job security, and confronting cultural cleavage) is likely to be both costly and divisive. Although punishing criminals has been a fiscal burden, it has not been divisive and, indeed, has been the foundation on which enduring and successful political coalitions have been constructed at the national and State levels. Moreover, for presidential candidates and members of Congress to divert attention from the economy to crime is to refocus the public's attention from problems for which the Federal Government is responsible to a problem for which local and county officials have primary responsibility.

Urban politics: Punishment as contested value

Although a punitive consensus emerges readily among those who are distanced from crime, proximity seems to reduce, or at least to destabilize, both instrumental and expressive forms of support for punishment. Those living closest to crime are not as likely to embrace get-tough policies, and local political leaders

are less inclined to campaign on crime. In short, a reverse synergy exists between politics and punishment in high-crime urban settings. The result is that, at the local level, both political leaders and the public tend to be more ambivalent about punitive responses to crime.

Proximity does not make people less concerned about crime. On the contrary, those closest to crime tend to be less punitive, in large part, precisely because they have a real, rather than a symbolic, stake in effective crime control strategies. For those in close proximity to crime, it is neither an expressive abstraction nor a political opportunity. The data also indicate that for both officials and the public generally, crime is not readily separable from a host of concrete structural problems, such as unemployment or inferior educational opportunities, that are associated with crime and, arguably, contribute to it. At the same time, those familiar with the forces driving marginalized Americans toward crime are less likely to be receptive to the moral case for punishment—especially punishment unaccompanied by measures to reduce crime and strengthen communities. In short, proximity to crime generates an intense engagement that casts doubt on both the easy moralizing and the superficial policy calculations associated with exclusively punitive crime control strategies.

Another reason that punitive wars against crime are of limited appeal in urban areas is because they tend to be racially divisive (Beckett 1997; Hall et al. 1978). Attitudinal research reveals that African-Americans respond to punishment with more skepticism than do whites. Although, at first glance, there appears to be “a fair degree of consensus between blacks and whites,” with blacks only slightly less punitive than whites (Cohn, Barkan, and Halteman 1991, 291), this agreement is more apparent than real.

In the first place, blacks and whites invest their punitive preferences with distinctly different meanings. Cohn, Barkan, and Halteman found that punitive attitudes among blacks are instrumentally driven by a fear of crime, whereas among whites punitiveness is rooted in “prejudice” (1991, 293). Insofar as punitive preferences are driven by prejudice, they are visceral and expressive and are thus unlikely to be influenced by even the most successful crime control strategies. Recall the research mentioned earlier that found peak punitiveness within the rural white hunting culture—among those, that is, who are neither threatened by, nor fearful of, crimes. Conversely, insofar as blacks are responding to a fear of victimization, they are more likely to evaluate punishment in instrumental terms.

Moreover, although African-American attitudes toward punishment are not exclusively instrumental, the expressive element tends to mobilize blacks *against* punishment. Consider, in this regard, Sasson’s focus group research

conducted among African-Americans. His Boston area neighborhood crime watch groups were strongly attracted to conspiratorial explanations of the high crime rates among blacks. These African-American respondents were willing to attribute “the drug trade and ‘black-on-black’ violence to the clandestine actions of powerful whites” (Sasson 1995, 266). Starkly put, there was an inclination to credit what most Americans find incredible: high crime in African-American neighborhoods as the *intended* consequence of genocidal policies pursued by white elites. According to Sasson, blacks are receptive to conspiracy theories because of “the absence of a public discourse on crime corresponding to African-American popular wisdom” (p. 281).¹⁴ Specifically, conspiracy theories flourish, he says, largely because there is no space in mainstream explanations of crime for one of the central “facts” of the African-American experience: the brutal reality of white racism.

If there are African-Americans who see crime itself as part of a deliberate plan fomented by whites to destroy black communities, it stands to reason that punitive responses to crime would be perceived as inextricably linked to the same plot. Blacks are, after all, being incarcerated in astonishing numbers while also being disproportionately subjected to police violence. Zero-tolerance policing, a centerpiece of urban anticrime strategies, is certainly intrusive and seems to be leading to increased police violence. Even police officers who believe in the effectiveness of zero-tolerance law enforcement are sensitive to its problematic repercussions. According to James Savage, president of the Patrolmen’s Benevolent Association in New York City:

When zero-tolerance tactics were first introduced by the department, crime was at an all time high. . . . Now that crime is way down, an adjustment of the strategy is required. If we don’t strike a balance between aggressive enforcement and common sense, it becomes a blueprint for a police state and tyranny. (Cooper 1999)¹⁵

Presumably whites continue to be less afflicted by this increasingly punitive police presence—thus, further exacerbating the racial schism. According to Scheingold (1995, 3):

[W]hites are likely to see the best police officers on their best behavior while African-Americans and other marginalized groups are likely to see the worst police officers at their worst. But it may also be because whites expect the police to treat “the dangerous classes” in just the ways that antagonize minorities. If so, then Andrew Hacker’s ominous admonition that we are *Two Nations: Black and White, Separate, Hostile and Unequal* may apply at least as much to the fight against crime as to other areas of American life.¹⁶

In short, crime in general and punitive policy initiatives in particular tend to pit whites against blacks.

Sampson and Bartusch recently conducted a multilevel statistical analysis of survey data compiled from 8,783 residents of 343 neighborhoods in Chicago and found that proximity to crime and police misconduct contributed to more complex attitudes about the nature of crime and punishment.

[N]eighborhoods of concentrated disadvantage display elevated levels of legal cynicism, dissatisfaction with police, and tolerance of deviance unaccounted for by sociodemographic composition and crime-rate differences. Concentrated disadvantage also helps explain why African-Americans are more cynical about law and dissatisfied with the police. Neighborhood context is thus important for resolving the seeming paradox that estrangement from legal norms and agencies of criminal justice, especially by blacks, is compatible with the personal condemnation of deviance. (1998, 777)

This does not mean that African-Americans are more accepting of crime, but their desire to reduce crime coexists with deep cynicism about, and distrust of, the criminal justice system (Podolefsky 1983; Hagan and Albonetti 1982). The increasing influence of minorities in urban electoral politics tends, then, to inject a moderating influence into policy choices.

With crime such a racially divisive issue, political and civic elites in urban areas have reasons not to campaign on crime—reasons for avoiding the issue rather than deploying it. Just this finding emerged from the most comprehensive available research, the Governmental Responses to Crime Project (Jacob and Lineberry 1982). Ten cities were examined over the 30-year period 1948 to 1978. To be sure, there were instances of successful campaigning on crime. The overall message of that research was, however, that most of the time, in most of the 10 cities, crime was not a salient issue. Similar findings emerged from a case study by one of the authors. That research, conducted in the 1980s, found that central city blacks were much less willing to support get-tough policies than were similarly situated whites (Scheingold 1991, 50–55). With civic elites arrayed against them, neither the law-and-order campaigns nor the campaigners were able to establish an influential, much less an enduring, political presence. Once again, occasionally successful law-and-order electoral campaigns were the exception that proved the rule (p. 66–69).

Electoral and commercial forces also contribute to policy moderation in urban areas. Civic elites are likely to see the politicization of street crime as bad for business—likely, that is, to drive people from the inner city to suburban shopping malls, housing developments, and business parks. Unlike their more distant counterparts in Washington, D.C., and even in State capitals, urban

political leaders and criminal process professionals are in the front line of “wars” waged against crime. They are directly answerable to an electorate that, on one hand, tends to see crime as one of a number of afflictions and, on the other, witnesses the collateral damage inflicted by overly zealous law enforcement (Scheingold 1995).

In racially heterogeneous urban settings, therefore, punishment and crime both become contested values rather than valence issues. Rather than symbolic expressions of putative support for punitive and exclusionary forms of social control, local crime control debates focus more on what will express moral approbation in a way that reduces crime and strengthens communities. For all of these reasons, we believe that urban policymaking processes are more inclined to take seriously the criminological knowledge that casts doubt on an exclusively punitive crime control strategy. It is no accident that more balanced and criminologically informed programs such as community policing and Weed and Seed programs are being embraced in urban areas. Consider also the findings emerging from a current study of the Weed and Seed program in Seattle. Local officials, responding to African-American constituents, have negotiated a partial reversal of the priorities of the Federal program—reducing its emphasis on punitive weeding provisions and giving more attention and resources to the preventive seeding provisions (Miller 1999).

This does not mean that the urban setting is devoid of punitive impulses or that the political ethos is not predominantly punitive from time to time and place to place.¹⁷ Rather, our point is that there is substantial receptivity to nonpunitive responses to crime among local elites, the lay public, and criminal process professionals—or to punitive responses that are also reintegrative (Braithwaite 1989). Accordingly, there are definitely insistent political incentives to develop a more balanced and less obtrusively punitive policy agenda.

Beyond Punishment: Policy and Political Alternatives

In concluding this paper, our agenda is twofold. On one hand, we sketch in the broad outlines of a crime control strategy that we believe would make much better sense than either punishment, per se, or the pervasively intrusive practices of the new penology. On the other hand, we look more closely at what is politically feasible. To do so, we balance the opportunities for reform suggested by our analysis of the political process against the constraints that stem from the ongoing problems of the liberal state. To invoke the mantra of this paper once again, our claim is that crime control policies must be understood as political choices made in contexts where options are constrained by larger cultural

and economic forces. Thus, although our analysis separates policy from politics, they are inextricably interdependent.

Beyond punishment: Strengthening communities and families

To discuss alternatives to punishment is in no way to argue against the need for punishment. In analyzing crime control debates, Currie is critical of the political right for dismissing prevention in favor of unlimited punishment. But he is also critical of the left for a failure to focus on crime prevention programs that work—and, instead, voicing uncritical support for social programs as being superior in all cases to punishment.

Given what we've learned about crime prevention in recent years, four priorities seem especially critical: preventing child abuse and neglect, enhancing children's intellectual and social development, providing support and guidance to vulnerable adolescents, and working intensively with juvenile offenders. . . . The first priority is to invest serious resources in the prevention of child abuse and neglect. The evidence is compelling that this is where much of the violent crime that plagues us begins, especially the kinds of violence we fear the most. (Currie 1998, 81–82)

Relying heavily on Currie's analysis and his proposals, we advocate an even-handed approach that takes more cognizance of the structural sources of crime and puts less emphasis on crime as a volitional act—a matter, that is, of strictly personal choice (Scheingold 1991, 7–15).¹⁸ Fundamentally, this means, in effect, investing in noncriminal justice system programs that, according to the available criminological knowledge, have crime prevention value. In this way, it will be possible to reduce the need to resort to the punitive crime control strategies that provide short-term drama and serve political needs, but tend at the same time to weaken the communities that are most victimized by crime. But there are also worthwhile steps that can be taken within the context of crime control policy per se, and we will begin with them.

We see community policing as a step in the right direction but only insofar as it is rooted in a genuine partnership among police officers, police departments, city governments, and community residents. Community policing programs should manifestly demonstrate how they would strengthen the communities most victimized by crime.

Nonpunitive crime prevention

Crime control policymakers would be well advised to heed medicine's first principle: Do no harm. Tonry's research indicates that this principle has certainly been violated in the so-called war on drugs. Its focus on street dealers and punitive sentencing policies has, he argues, had foreseeable and destructive impacts on African-American families and communities. Accordingly, he proposes reducing statutory maximums or establishing strong presumptive upper limits on punishment severity, abolishing all mandatory penalties, empowering judges to mitigate sentences based on individual circumstances, and "greatly limit[ing] the use of imprisonment" while using the money saved to invest in communities (1995, 41–46).

In addition to eliminating the *negative*, there are a variety of *positive* steps that can be taken within the criminal justice system itself. We believe these will promote both crime reduction and stronger families and communities. Programs for repeat offenders can be structured in ways that circumvent the exclusionary consequences of deterrent, incapacitative, and preemptive strategies. Hope (1995) and Tremblay and Craig (1995) argue for the crime prevention value of investing in vulnerable adolescents in ways that build concrete skills and support systems. According to Currie, this is the strength of programs like Job Corps, where intensive skill training "significantly reduced violent crime among its graduates" (1998, 102). The key remains a comprehensive and consistent approach that offers tangible supports (valued skills, activities, stipends, relational networks). Punitive programs (boot camps) that are currently popular but are of dubious value (Simon 1995) and treating offenders in isolation are a "prescription for failure" (Currie 1998, 105). When offenders are treated as "participants in a range of institutions, from the family to the school and beyond," success has been shown to be more likely (Currie 1998, 107).

Community policing has, of course, become a central feature of crime control strategies throughout the United States. We see community policing as a step in the right direction but only insofar as it is rooted in a genuine partnership among police officers, police departments, city governments, and community residents. Community policing programs should manifestly demonstrate how they would strengthen the communities most victimized by crime. Similarly, it is essential that aggressive crime suppression activity not be undertaken without a demonstrated consensus in the communities concerned over the definition of the problem and the proposed solution. Finally, self-consciously and in consultation with citizen partners, police must avoid practices that, even if effective in the short term, undermine the relational networks, resources, and informal social control mechanisms communities depend on to subject unaccountable power in their neighborhoods to critical public scrutiny (Lyons 1999).

Meares and Kahan (1998, 816–828) argue along these same lines that a focus on policing that strengthens communities of concentrated disadvantage would emphasize different police practices than those currently in place. Reverse stings, for instance, would spread the disorganizing impact of formal sanctions across many communities and are likely to be just as effective as buy-busts that concentrate that impact on those communities already least advantaged (see also Miller 1999). Curfew laws rather than aggressive gang units, order maintenance that does not rely on arrests and focuses on the concerns of all communities, and alliances with African-American churches can each contribute to both crime prevention and strengthening those communities most victimized by crime.

Structural responses to crime

But to focus on what criminal justice agencies can do on behalf of families and communities only scratches the surface of the problem. In the United States, “unlike other advanced societies, we cannot link our early-intervention programs to national-level health care” and “we have traditionally over-estimated the capacity of purely educational strategies to over-come the effects of endemic poverty, community disorganization, and economic insecurity” (Currie 1998, 98–100). In short, we agree with Currie that it is necessary to combine social service interventions with investments in structural reform.

Consider in this connection Tremblay and Craig’s (1995) detailed review of the literature evaluating programs designed to prevent crime by reducing developmental risk factors. They conclude that “money invested in early prevention is money saved later on remedial services in school, social, physical, and mental health services for families and correctional services for juveniles and adults” (p. 224). Programs that target children engaging in unusually disruptive behavior, experiencing cognitive difficulties, or being subjected to poor parenting had “generally positive results” (p. 151).

Tremblay and Craig’s review covered many programs, but one common characteristic of success emerged consistently. The successful programs invested in teachers, parents, and children by distributing resources in the form of concrete *skills* (such as moral and legal reasoning skills, conflict management skills, study skills), consistent and

Because areas of concentrated disadvantage lack precisely those resources needed to mobilize the informal social controls associated with strong communities, a failure to make the necessary structural investment inevitably leads to punishment as the only meaningful alternative.

targeted *support* systems, caring relational *networks* (social bonding), and self-confidence stemming from concrete *achievements*. These investments paid off in terms of improved attitudes toward school, better academic performance, fewer school suspensions or expulsions, an increased capacity to hold a job after graduation, less drug abuse, and often significantly less criminal behavior (Tremblay and Craig 1995).

Child abuse itself is a crime linked to 5,000 deaths, 18,000 permanent disabilities, and 150,000 serious injuries per year. Children who survive this threat “are far more likely to turn to violence themselves as teenagers or adults” (Currie 1998, 82). Abused kids are more likely to engage in serious delinquency (Tonry and Harrington 1995). One key ingredient of crime prevention strategies is, therefore, early and consistent assistance for at-risk families (Currie 1998, 85–86). In reviewing a prenatal–early infancy program pioneered in Elmira, New York, Currie concluded that even for those families at greatest risk of producing delinquent children, timely and sustained investment that supported the parents and children led to crime rates that were lower than those of control groups.

The families, in short, represented a tough population, and their children were heavily exposed to the multiple adversities of poverty and social marginality. . . . The control children were almost four times as likely to have a formal juvenile record (22 percent versus 6 percent of the program children). And even the relatively rare delinquencies of the program children were minor. (1998, 97)

Returning to Hope’s review of the literature on community crime prevention, we note that he underscores the importance of investing in ways that counter the “nexus of youth poverty and crime emerging in areas where crime and poverty are concentrating” (1995, 77).¹⁹

In the final analysis, then, neither families nor communities are going to be strengthened without directly tackling the extreme deprivation that “inhibits children’s intellectual development, breeds violence by encouraging child abuse and neglect, and undermines parents’ ability to monitor and supervise their children” (Currie 1998, 135–140). In a context of predominantly punitive, politically appealing approaches to crime control, families are left without an alternative to poverty and dependence on state agency. Accordingly, Currie (1998, 150–157) proposes:

- Living wage campaigns to raise the minimum wage.
- Upgrading part-time work to include benefits and security against arbitrary layoffs.
- Providing universal health and child care nationally.

- Creating jobs in inner cities: jobs in child care, child protection, health care, and public safety.

In short, because chronic joblessness hurts families in ways that cause crime, Currie suggests that the most intelligent crime prevention approach would focus on reforming work rather than welfare. People who work should be able to earn enough to support their families. More broadly, the idea is to place the welfare of at-risk families and the well-being of communities most victimized by crime at the top of the criminal justice agenda. These are, after all, sites “where the strains and pressures of the larger society converge to influence individual development” (Currie 1998, 141).

Because areas of concentrated disadvantage lack precisely those resources needed to mobilize the informal social controls associated with strong communities, a failure to make the necessary structural investment inevitably leads to punishment as the only meaningful alternative. As Hope puts it: “Disintegrating urban communities may need significant social investment in their institutional infrastructure to offset the powerful tendencies of destabilization of poor communities within the urban free-market economy” (1995, 78). Unlike whites fleeing to the suburbs, privatization in fortress communities is not an option for these communities. For crime prevention to make sense, investment in the strength of these communities is an indispensable complement to punishment. As for punishment itself, there is reason to believe that forms of punishment that are reintegrative will strengthen communities more than those that are strictly exclusionary (Braithwaite 1989).

Beyond punishment: The politics of reform

The political struggle over crime control policy takes place inside and outside the communities most victimized by crime. Within the afflicted communities, the streets are the site of encounters over the status and funding of professional law enforcement, the tax burdens imposed on various business interests, and the electoral fortunes of political leaders and governing coalitions. We have already established that punitive tendencies are under considerable pressure in these urban settings. In our concluding pages, we will demonstrate that even outside the inner city, punishment is not uncontested, nor is a punitive agenda indispensable for electoral success.²⁰ It is, however, much less clear that a non-punitive agenda will necessarily translate into the kind of structural reform that we claim is the key to strengthening communities and families in crisis.

A nonpunitive political ethos?

There are a number of indications that it is not only in the inner cities that support for punishment is equivocal. Most broadly, the political ethos has never

really been as punitive as is often thought to be the case (Gottfredson and Taylor 1987). Throughout the last decade, public opinion research has revealed a distinctly nonpunitive streak. In the same 1989 survey that found rehabilitation was preferred over punishment by 48 percent to 38 percent, it was discovered that, by a 61- to 32-percent margin, the public believed that attacking social problems was more likely to deter crime than improved law enforcement (Gallup Organization 1989, 31). Moreover, when asked about the factors that are responsible for crime, only 4 percent chose lenient courts and 4 percent chose lax punishment while 58 percent pointed to drugs, 14 percent to unemployment, and 13 percent to a breakdown in family values (p. 25). In other words, even if the public is inclined to treat known criminals harshly, they have a broad sense of the causes of crime and of ways to reduce it.

Consider also the moderation beneath surface enthusiasm for capital punishment. Between the mid-1960s and the mid-1990s, support for capital punishment grew from just above 40 percent to more than 75 percent (*American Enterprise* 1991, 80). It might seem at first glance that these numbers run counter to our proposition, but research by Bowers, Vandiver, and Dugan suggests why this is not the case. They report that these polls have been “misinterpreted” and that:

[T]here is now solid evidence that the “prevailing wisdom” of “strong,” “deep-seated” public support for the death penalty is mistaken. . . . When people are presented with an alternative to the death penalty that incorporates both lengthy imprisonment and restitution to murder victims’ families, and are then asked whether they would prefer the death penalty to such an alternative, they consistently choose the non-death-penalty alternative. (1994, 79)

More specifically, in this research conducted in 1991 in New York and Nebraska, support for capital punishment was cut almost in half when respondents were presented with the alternative of life in prison without the possibility of release. Support dropped still further when restitution was added to the life in prison option (Bowers, Vandiver, and Dugan, 1994, tables 5 and 7). These findings do not, of course, reveal an aversion to punishment. Indeed, there was strong agreement in both States that we should be tough on criminals—even tougher than we already are (table 9). What is revealed, however, is that there is political space for enterprising political leaders who refuse to raise the punitive ante and instead choose the instrumental over the expressive.

Bowers and his associates further demonstrate the existence of this nonpunitive political space by the responses of legislators to capital punishment. On balance, the legislators were, if anything, slightly less punitive than their constituents (table 13). On capital punishment, however, they took a tougher line. Why? Bowers and colleagues state:

Seven out of ten [New York] legislators believed that their constituents would prefer the death penalty over any of the other alternatives—when . . . only one in three voters statewide preferred it to [life without parole], and only one in five preferred it to [life without parole plus restitution]. (p. 139)

In other words, what drove capital punishment policy in New York was not so much a punitive public or a punitive legislature as legislative misperception of public preferences.²¹

Toward a structural crime control strategy?

The empirical record thus suggests that punitive policies are politically constructed on surprisingly uncertain foundations. Research suggests that the general public and State agencies are more ambivalent and more conflicted about punitive policies than a cursory reading of public opinion and State policy might suggest. Given these crosscurrents, punitively inflected politics of crime and punishment are hardly inevitable. On the other hand, there is no quarreling with the electoral success that has been achieved by hardline campaigning on crime in State and presidential politics.

So even if we are correct and it is *possible* to steer a nonpunitive course, is there any reason to believe that it is *likely*? And, moreover, is there any reason to believe that nonpunitive policies will progress to genuine structural reform? Certainly fiscal prudence would militate against further prison construction. But States continue to build prisons at an alarming rate. Perhaps fiscal discipline will kick in—but perhaps not. After all, as indicated previously, prison construction as well as many other policies and practices associated with the emergent punitive state have a built-in economic payoff.

We do, however, see a glimmer of hope elsewhere. Punitively inflected politics of crime and punishment resonate with anger and anxiety generated by the interaction of social, cultural, and economic instability. It is therefore hardly surprising that, given the high level of prosperity that this Nation has enjoyed during most of the 1990s, neither crime nor punishment has been the veritable political pot of gold that it once was. Although the rising economic tide has definitely not raised all boats, it is entirely plausible to believe the influential, so-called middle class has been sufficiently mollified that it offers less fertile soil in which to plant the seeds of law-and-order populism. Of course, insofar as we are correct, this respite from a punitive political ethos will last only as long as our current prosperity. Still, for the time being, it is reasonable to hope and expect that the nonpunitive approaches being developed in inner cities are less likely to be undermined by enterprising outsiders in Washington, D.C., and in the State capitals.

On the other hand, the prospects for genuine structural reform seem less promising. We do believe that with less free-floating public anger and anxiety for politicians to exploit, it will become increasingly difficult to deploy crime as a political fig leaf concealing the structural failings of our liberal-democratic state. But it also seems that the current prosperity has itself provided something of a fig leaf and, if so, we may be further from facing up to our structural problems.²² In addition, the burden of these problems increasingly falls on those largely without political voice—the so-called dangerous classes that figure so prominently in the governing-through-crime literature.

Even if criminal justice agencies pursue more enlightened crime control policies and practices, there is no reason to believe that macroeconomic policy-makers will shoulder the redistributive burdens implied by genuine structural reform. Indeed, it may even be that the better the nonpunitive palliatives work, the less incentive there will be to undertake structural remedies. Further complicating policy choices is the distinct possibility that redistributive policies could generate a backlash by fueling the kinds of resentments on which law-and-order politicians have been preying for many years. Thus, one need not think of the crisis of the liberal-democratic state as a terminal condition to be pessimistic about the prospects for the kind of genuine structural reform that we see as a necessary component of an effective and inclusive crime control strategy.

Notes

1. Put another way, while criminologically speaking, the case for punishment is contested terrain, politically speaking, punishment tends to be largely uncontested. A heated debate among criminologists is thus politically transformed into widespread acclaim for punishment as both a necessary and a sufficient response to crime.
2. Strictly speaking, Wilson has always given priority to certainty, rather than to severity, of punishment—as the quoted statement clearly indicates. But this distinction is regularly lost in the public discourse on crime and punishment, and, even in its qualified form, there is a clear implication that punishment is exclusively about the relationship between the law-abiding citizens represented by the State and the criminal element.
3. According to Currie (1998, 29): “The incarceration rate has risen much more than anyone imagined. But there has been *no* overall decrease in serious criminal violence, and there have been sharp *increases* in many places—including many of the places that incarcerated the most or increased their rates of imprisonment the fastest. The national incarceration rate doubled between 1985 and 1995 alone, and every major reported violent crime increased.”

4. Tonry goes on to note that this research was “commissioned and paid for by the Reagan administration’s Department of Justice” but had no discernable effect on policy-makers who, Tonry concludes, could not have used the best available data in deciding to adopt punitive policies that depend on deterrence (1995, 17–18). The disconnect between criminology and policymaking is, of course, central to our underlying argument and will be revisited at length in the next section of this paper.

5. Further, Fagan (1994, 207) suggests that an approach that accounts for contextual factors like the job market will avoid the “counter-deterrent effects” of strictly punitive approaches.

6. Blumstein (1998, 132) makes the same point as part of a multifaceted, carefully balanced (but largely skeptical) account of the incapacitative contribution of punitive sentencing to crime reduction. “The incapacitative effects could have been diminished because the marginal prisoners brought into prison during the expansion [of incarceration] had lower values of offending frequency . . . than might have been anticipated.”

7. Blumstein (1998) agrees that recruiting replacement drug dealers is likely to reduce the incapacitative effects of stiff sentences (p. 131), and he takes advocates of incapacitation to task for ignoring its “postrelease” consequences. Unlike Currie, however, Blumstein believes that these consequences may be both positive and negative (p. 133).

8. In the past 5 years, there has been considerable discussion about the dramatic reduction in urban crime—first noted in New York City and attributed to that city’s zero-tolerance policing, and thus arguably, to punishment. As we see it, the returns are not yet in and other explanations should probably be taken into account—for example, the maturation of the drug markets and unemployment rates that are at an all-time low. It should also be noted that, while our focus is on the prevailing punitive trends in crime control policy, current policy also includes less punitive approaches, such as community policing, drug courts, and family violence courts. Clearly, nonincarcerative sanctions and a concern for rehabilitation remain part of the overall crime control picture. We see these less punitive approaches as both promising and, in the current punitive context, unlikely to realize that promise. As currently practiced, initiatives like community policing, for instance, are often constructed as part of larger punitive efforts emphasizing public relations, aggressive law enforcement, and empowering the police department, often at the expense of strengthening those communities most victimized by crime (Lyons 1999).

9. In his classic study, *The Morality of Law*, Lon Fuller argues that these are among the defining elements of law—in his words, “the morality that makes law possible” (1964, ch. 2).

10. Davey also contrasts the incarceration rates of two other States with similar demographics and Republican Governors. While South Carolina’s incarceration rate jumped from 294 to 415 per 100,000 (1985–89), North Carolina’s rate fell from 254 to 250. According to Davey, the elevated rates in South Carolina were because Governor Carrol

Campbell “knew well the value of exploiting the voter’s fear of crime” (1998, 60). Meanwhile, in North Carolina, Governor James Martin did build some new prisons but only to ease overcrowding. Despite the danger that building prisons would inevitably lead to filling them, Davey argues that “in the absence of a ‘law and order’ governor, that apparently did not happen in North Carolina” (p. 62).

11. Blumstein (1998) provides a criminologically based explanation of the stunning acceleration of incarceration rates beginning fairly early in the 1970s (see exhibit 5). Blumstein traces the upturn to criminologist Robert Martinson’s widely read 1974 *Public Interest* article “What Works? Questions and Answers About Prison Reform.” Martinson’s answer, drawn from more than a decade of empirical research, was that nothing worked. Blumstein claims that it was this criminological research that spearheaded a retreat from rehabilitation and an increasingly insistent demand to get tough with criminals. We see things differently. The years in which incarceration took off were also years of double-digit inflation, heated conflict over busing, and white flight—and just after the height of social turmoil over the war in Vietnam (Scheingold 1991, 66–71). In other words, for reasons detailed in the pages ahead, we look to the major dislocations of the 1970s to explain the upsurge in incarceration.

12. U.S. Census Bureau data lend credence to Melossi’s analysis. From 1974 to 1994, the income of the poorest (lowest quintile) Americans fell from 4.3 percent to 3.6 percent of total income earned. Middle-class (the middle three quintiles) income fell from 52.2 percent to 47.3 percent. At the same time, the income of the wealthiest (highest quintile) Americans increased from 43.5 percent to 49.1 percent (U.S. Bureau of the Census 1996).

13. For a complementary psychoanalytic explanation that links the lure of punishment to perceptions of declining status and/or material well-being, see Chancer and Donovan (1994).

14. A newspaper report implicating the CIA in inner-city drug dealing both fueled the conspiracy fires and revealed how rapidly they tend to spread among African-Americans (Golden 1996).

15. Retiring San Diego Police Chief Jerry Sanders urges that this statement be taken at face value and not attributed to a hidden agenda or to political posturing. He argues, as we have, that “no one is more aware than officers on the beat that arrests and citations don’t solve many long-term problems” (Sanders 1999).

16. Reactions to the O.J. Simpson trial revealed this same black and white division on matters of criminal justice, as did the earlier reactions to the Bernhard Goetz incident (Rubin 1986).

17. It is instructive that both of these studies found substantial urban politicization of crime only in the mid- to late 1970s—very close to the period when incarceration took off and society seemed to be coming apart at the seams. This is also, arguably, the period when conservative whites were making a kind of last-ditch stand against unwelcome changes in the racial composition and balance of political power in U.S. cities.

18. We realize that some of these proposals are controversial and that there are prominent figures, perhaps most notably Charles Murray, who doubt that they will work. Again, we are treading on contested terrain—rooted, in this instance, in competing and ultimately irreconcilable views of human nature. Thus, Murray rejects the investment of resources in improving inner-city schools, concluding that there is “little hope” for success because the contribution of formal education “has already been realized” (1984, 389). Further, he rules out several preschool programs he found to be effective, because they were too costly. He does not, however, contrast these costs with the \$100 billion spent on crime control in 1993 (Beckett 1997, 3)—not to mention the many other costs that we analyzed earlier. We are under no illusions that we can resolve this longstanding and deep-seated conflict. Accordingly, our objective is to present the data on which our own judgment rests. In so doing, we offer what are, at the very least, plausible and promising additions to the crime control policy repertoire.

19. Hope also acknowledges the importance of incorporating the concerns of victims into such programs. Because these are areas with concentrations of victims, not just offenders, he argues on behalf of programs “to protect the fearful, vulnerable, and victimized if the destabilization of communities is to be arrested” (1995, 77). To ignore victims is likely to encourage destabilizing forms of flight, blight, and, perhaps, gentrification.

20. With that said, it is important to keep in mind that policies that are not overtly punitive do, nonetheless, contribute to the punitive tide. We have already called attention to the “new penology”—various forms of surveillance and separation. Although less overtly punitive, the intrusive practices of the new penology fall heavily on the powerless. For example, the *New York Times* recently editorialized about New Jersey’s “racial profiling and drug interdiction” programs: “In the name of crime-fighting, the [New Jersey State Police] agency has created a vast surveillance network that engulfs large numbers of innocent hotel guests” (*New York Times* 1999, A30). Similarly, private-sector security devices that protect the social space of the privileged constrict the social space available to the marginalized. Thus, even if politics *within* the liberal State are more permeable and more protean than the politics *of* the liberal State, it does not necessarily follow that repression and exclusion will be avoided or mitigated.

21. Similar findings have been uncovered in Indiana by Edmund F. McGarrell and Marla Sandys (1993).

22. How all this plays out in the long run will depend on the extent to which neoliberal conceptions of freedom are internalized. As Nikolas Rose (1999, 156–166) persuasively argues, the insecurities of corporate downsizing, mid-career retraining, and the like are currently being touted as opportunities to display resilience and resourcefulness. Insofar as the vicissitudes of the neoliberal market are, thus, successfully transmuted into a hallmark of freedom, it could be argued that there will be less anxiety and anger available to sustain the politics of law and order. On the other hand, to thus repress anxiety and insecurity might well trigger resentments that, although more deeply buried, could provide soil that is at least as fertile for the kinds of political mischief that we have documented in this paper.

References

- American Enterprise*. 1991. Crimes, cops, and courts. *American Enterprise* 2 (July–August): 74–82.
- Banfield, Edward. 1970. *The unheavenly city: The nature and future of our urban crisis*. Boston: Little, Brown and Company.
- Beckett, Katherine. 1997. *Making crime pay: Law and order in contemporary American politics*. New York: Oxford University Press.
- Bennett, W. Lance. 1996. *News: The politics of illusion*. New York: Longman.
- Berk, Richard A., Harold Brackman, and Selma Lesser. 1977. *A measure of justice: An empirical study of changes in the California penal code, 1955–1971*. New York: Academic Press.
- Blumstein, Alfred. 1998. U.S. criminal justice conundrum: Rising prison populations and stable crime rates. *Crime & Delinquency* 44 (January): 127–135.
- . 1997. Interaction of criminological research and public policy. *Journal of Quantitative Criminology* 12 (4): 349–361.
- Bowers, William, Margaret Vandiver, and Patricia Dugan. 1994. A new look at public opinion on capital punishment: What citizens and legislators prefer. *American Journal of Criminology* 22:77–150.
- Braithwaite, John. 1989. *Crime, shame, and reintegration*. New York: Cambridge University Press.
- Cain, Maureen. 1990. Towards transgression: New directions in feminist criminology. *International Journal of Sociology of the Law* 22:261–277.
- Chancer, Lynn, and Pamela Donovan. 1994. A mass psychology of punishment: Crime and the futility of rationally based approaches. *Social Justice* 21:50–72.
- Chicago Community Policing Evaluation Consortium. 1996. *Community policing in Chicago, year three*. Illinois Criminal Justice Information Authority.
- Christie, Nils. 1994. *Crime control as industry: Toward gulags, Western style*. New York: Routledge.
- Cohen, Stanley. 1985. *Visions of social control*. Cambridge, England: Polity Press.
- Cohn, Steven, Steven Barkan, and William Halteman. 1991. Punitive attitudes toward criminals: Racial consensus or racial conflict? *Social Problems* 38:287–296.
- Cooper, Michael. 1999. Police delegates rebuke the commissioner. *New York Times*, 14 April.

- Covington, Jeannette, and Ralph Taylor. 1991. Fear of crime in residential neighborhoods: Implications of between- and within-neighborhood sources for current models. *Sociological Quarterly* 43 (Summer): 231–249.
- Currie, Elliott. 1998. *Crime and punishment in America*. New York: Metropolitan Press.
- . 1991. The politics of crime: The American experience (A debate between Elliott Currie and James Q. Wilson). In *The politics of crime control*, edited by Kevin Stenson and David Cowell. London: Sage Publications.
- Dahrendorf, Ralf. 1985. *Law and order*. London: Stevens.
- Davey, Joseph Dillon. 1998. *The politics of prison expansion: Winning elections by waging war on crime*. Westport, Connecticut: Praeger.
- Davis, Mike. 1990. *City of quartz: Excavating the future of Los Angeles*. New York: Vintage Books.
- Edelman, Murray. 1977. *Political language: Words that succeed and policies that fail*. New York: Academic Press.
- Egan, Timothy. 1999. The war on crack retreats, still taking prisoners. *New York Times*, 28 February.
- Elias, Robert. 1986. *The politics of victimization: Victims, victimology, and human rights*. New York: Oxford University Press.
- Ellsworth, Phoebe C., and Samuel R. Gross. 1994. Hardening of attitudes: Americans' views on the death penalty. *Journal of Social Issues* 50 (2): 19–52.
- Erikson, Kai. 1966. *Wayward puritans: A study in the sociology of deviance*. New York: John Wiley & Sons.
- Fagan, Jeffrey. 1994. Do criminal sanctions deter crimes? In *Drugs and crime: Evaluating public policy initiatives*, edited by Doris Layton MacKenzie and Craig Uchida. Thousand Oaks, California: Sage Publications.
- Feeley, Malcolm, and Jonathan Simon. 1992. The new penology: Notes on the emerging strategy of corrections and its implications. *Criminology* 30 (4): 449–474.
- Fuller, Lon L. 1964. *The morality of law*. New Haven: Yale University Press.
- The Gallup Organization. 1989. *Gallup Report* 285 (June).
- Garland, David. 1996. The limits of the sovereign state: Strategies of crime control in contemporary society. *British Journal of Criminology* 36:445–471.
- Gaubatz, Kathlyn. 1995. *Crime in the public mind*. Ann Arbor: University of Michigan Press.

Gilliom, John. 1996. *Surveillance, privacy, and the law: Employee drug testing and the politics of social control*. Ann Arbor: University of Michigan Press.

Golden, Tim. 1996. Tale of CIA and drugs has a life of its own. *New York Times*, 21 October.

Gordon, Diana. 1994. *The return of the dangerous classes: Drug prohibition and policy politics*. New York: W.W. Norton.

———. 1990. *The justice juggernaut: Fighting street crime, controlling citizens*. New Brunswick, New Jersey: Rutgers University Press.

Gottfredson, S., and R. Taylor. 1987. Attitudes of correctional policymakers and the public. In *America's correctional crisis: Prison populations and public policy*, edited by S. Gottfredson and S. McConville. New York: Greenwood Press.

Greene, Jack, and Stephen Mastrofski, eds. 1988. *Community policing: Rhetoric or reality*. New York: Praeger.

Hagan, J., and C. Albonetti. 1982. Race, class, and perceptions of criminal justice in America. *American Journal of Sociology* 88:329–355.

Hall, Stuart, Chas Critcher, Tony Jefferson, John Clarke, and Brian Roberts. 1978. *Policing the crisis: Mugging, the state, and law and order*. London: Macmillan.

Hope, Tim. 1995. Community crime prevention. In *Building a safer society: Strategic approaches to crime prevention*, edited by Michael Tonry and David S. Harrington. Vol. 19 of *Crime and justice: A review of research*. Chicago: University of Chicago Press.

Hunter, James Davison. 1991. *Culture wars: The struggle to define America*. New York: Basic Books.

Jacob, Herbert, and Robert Lineberry. 1982. *Governmental responses to crime: Executive summary*. NCJ 81621. Washington, D.C.: U.S. Department of Justice, National Institute of Justice.

King, Michael. 1989. Social crime prevention a la Thatcher. *Howard Journal* 28:291–312.

Klockars, Carl. 1988. The rhetoric of community policing. In *Community policing: Rhetoric or reality*, edited by J. Greene and S. Mastrofski. New York: Praeger.

LaFree, Gary. 1998. *Losing legitimacy: Street crime and the decline of social institutions in America*. Boulder, Colorado: Westview Press.

Lyons, William. 1999. *The politics of community policing: Rearranging the power to punish*. Ann Arbor: University of Michigan Press.

- Martinson, Robert. 1974. What works? Questions and answers about prison reform. *Public Interest* 35:22–54.
- McGarrell, Edmund F., and Marla Sandys. 1993. Indiana citizens and lawmakers on the death penalty: Results of the 1992–1993 public and legislative surveys. Unpublished manuscript, July.
- Meares, Tracey, and Dan Kahan. 1998. Law and (norms of) order in the inner city. *Law & Society Review* 32 (4): 804–838.
- Melossi, Dario. 1993. Gazette of morality and social whip: Punishment hegemony and the case of the USA, 1970–1992. *Social and Legal Studies* 2:259–279.
- Miller, Lisa. 1999. Taking control: Race, community, and the politics of crime prevention. Ph.D. diss., University of Washington.
- Murray, Charles. 1984. *Losing ground: American social policy, 1950–1980*. New York: Basic Books.
- New York Times*. 1999. New Jersey's trooper scandal. Editorial, 30 April.
- Packer, Herbert. 1968. *The limits of the criminal sanction*. Stanford, California: Stanford University Press.
- Peterson, Wallace C. 1991. The silent depression. *Challenge* 34 (4): 29–34. Quoted in Dario Melossi, Gazette of morality and social whip: Punishment hegemony and the case of the USA, 1970–1992, *Social and Legal Studies* 2 (1993): 267–268.
- Podolefsky, A. 1983. *Case studies in community crime prevention*. Springfield, Illinois: Charles C. Thomas.
- Quinney, Richard. 1980. *State, class, and crime*. New York: Longman.
- Rose, Nikolas. 1999. *Powers of freedom: Reframing political thought*. Cambridge: Cambridge University Press.
- Rubin, Lillian. 1986. *Quiet rage: Bernie Goetz in a time of madness*. Berkeley: University of California Press.
- Sampson, Robert, and Dawn Jeglum Bartusch. 1998. Legal cynicism and (subcultural?) tolerance of deviance: The neighborhood context of racial differences. *Law & Society Review* 32 (4): 777–804.
- Sanders, Jerry. 1999. Refreshing copspeak. *New York Times*, 16 April.
- Sasson, Theodore. 1995. African-American conspiracy theories and the social construction of crime. *Sociological Inquiry* 65:265–285.

Savelsberg, Joachim. Forthcoming. Kulturen staatlichen strafens: USA–Germany. (Cultures of state punishment: USA–Germany.) In *Die vermessung kultureller unterschiede: USA und Deutschland im vergleich*, edited by J. Gerhards. Opladen, Germany: Wesdeutscher Verlag.

———. 1994. Knowledge, domination, and criminal punishment. *American Journal of Sociology* 99:911–943.

Scheingold, Stuart A. 1998. Constructing the new political criminology: Power, authority, and the post-liberal state. *Law and Social Inquiry* 23 (Fall): 857–895.

———. 1995. The politics of street crime and criminal justice. In *Crime, communities, and public policy*, edited by Lawrence B. Joseph. Chicago: University of Chicago Press.

———. 1991. *The politics of street crime: Criminal process and cultural obsession*. Philadelphia: Temple University Press.

———. 1984. *The politics of law and order: Street crime and public policy*. New York: Longman.

Schlosser, Eric. 1998. The prison-industrial complex. *Atlantic Monthly* 282 (December): 51–77.

Schwendinger, Herman, and Julia Schwendinger. 1993. Giving crime prevention top priority. *Crime & Delinquency* 39 (October): 425–446.

Simon, Jonathan. 1997. Governing through crime. In *The crime conundrum: Essays on criminal justice*, edited by Lawrence Friedman and George Fisher. Boulder, Colorado: Westview Press.

———. 1995. They died with their boots on: The boot camp and the limits of modern penalty. *Social Justice* 22:25–48.

Stinchcombe, Arthur, Rebecca Adams, Carol A. Heimer, Kim Lane Schepple, Tom Smith, and Garth Taylor. 1980. *Crime and punishment: Changing attitudes in America*. San Francisco: Jossey-Bass.

Tonry, Michael. 1995. *Malign neglect: Race, crime, and punishment in America*. New York: Oxford University Press.

Tonry, Michael, and David Harrington. 1995. Strategic approaches to crime prevention. In *Building a safer society: Strategic approaches to crime prevention*, edited by Michael Tonry and David S. Harrington. Vol. 19 of *Crime and justice: A review of research*. Chicago: University of Chicago Press.

———, eds. 1995. *Building a safer society: Strategic approaches to crime prevention*. Vol. 19 of *Crime and justice: A review of research*. Chicago: University of Chicago Press.

Tremblay, Richard, and Wendy Craig. 1995. Developmental crime prevention. In *Building a safer society: Strategic approaches to crime prevention*, edited by Michael Tonry and David S. Harrington. Vol. 19 of *Crime and justice: A review of research*. Chicago: University of Chicago Press.

Tyler, Tom, and Robert Boeckmann. 1997. Three strikes and you are out, but why? The psychology of public support for punishing rule breakers. *Law & Society Review* 31 (2): 200–214.

U.S. Bureau of the Census. 1996. Income, poverty, and valuation of non-cash benefits: 1994. In *Current Population Reports*, series P60–189. Washington, D.C.

Wilson, James Q. 1991. The politics of crime: The American experience (A debate between Elliott Currie and James Q. Wilson). In *The politics of crime control*, edited by Kevin Stenson and David Cowell. London: Sage Publications.

———. 1985. *Thinking about crime*. Rev. ed. New York: Vintage Books.

———. 1977. *Thinking about crime*. New York: Vintage Books.

Windlesham, Lord. 1998. *Politics, punishment, and populism*. New York: Oxford University Press.

Zimring, Franklin, and Gordon Hawkins. 1995. *Incapacitation: Penal confinement and the restraint of crime*. New York: Oxford University Press.

Dynamics of the Drug-Crime Relationship

by Helene Raskin White and D.M. Gorman

This chapter explores changes and continuities in the drug-crime relationship during the past several decades. First, we discuss the relationship in a historical context highlighting changes in U.S. Federal policy. Next, we examine the key methodological issues involved in empirically understanding the drug-crime connection. In this section we identify inconsistencies in definitions and measurement of key variables and discuss the advantages and limitations of alternative sampling frames. We then trace trends in drug use and crime over time using national and city-level datasets. These data demonstrate that trends vary by city and that there is no uniform association between any type of drug use and any type of crime. After this, we present general theoretical models of the drug-crime connection, including that drug use causes crime, that crime leads to drug use, and that both drug use and crime are caused by the same factors. Next, we review the empirical research that supports and refutes these explanatory models. The review indicates that one single model cannot account for the drug-crime relationship. Rather, the drug-using, crime-committing population is heterogeneous, and there are multiple paths that lead to drug use and crime. The chapter concludes with a discussion of policy options and implications for the next century.

Helene Raskin White is a Professor at the Center of Alcohol Studies and in the Sociology Department, Rutgers, The State University of New Jersey. D.M. Gorman is an Assistant Professor in the Department of Social and Behavioral Health, School of Rural Public Health, Texas A&M University System Health Science Center.

Since 1987, when the “war on drugs” intensified in the United States, the prison population has increased by 114 percent (U.S. Department of Justice [DOJ] Bureau of Justice Statistics [BJS] 1998). During this same period, the proportion of Federal prisoners sentenced for drug offenses rose from slightly more than 40 to 60 percent. Not surprisingly, the relationship between drug use and criminal behavior is a source of concern for policymakers and researchers, as well as the general public. Researchers probing the links between drug use and crime for the past half century have produced an abundance of contradictory findings. These disparities have paved an erratic course for social policy. Antidrug and anticrime policies and programs have been developed and have received public funding, political endorsement, and popular support in the absence of any scientific evidence demonstrating their efficacy (Buchanan and Wallack 1998; Gorman 1998; Reinerman and Levine 1989; Reuter 1997). Conversely, other policies and interventions languish due to their unpopularity among politicians and the general public despite research that indicates their net benefits outweigh their costs. An obvious example of the latter is needle exchange programs (Weingardt and Marlatt 1998). In this sense, drug control policies are no different from other areas of social policy. That is, programs that fit some broad ideological agenda or vision will usually survive regardless of the scientific evidence (Sowell 1995). Research can help us make informed decisions among the choices available, but, more often than not, policy decisions concerning crime and drugs will be determined by influences other than empirical evidence.

Policymakers assume that an important connection exists between drug use and crime (Watters, Reinerman, and Fagan 1985), yet the precise nature of the relationship remains elusive. Moreover, policymakers working within different areas of government have different opinions about how to respond to crime and drug use. Law enforcement officials typically favor punishment and deterrence, whereas health and social welfare officials favor prevention and treatment. When crime and drug use decline, proponents of both approaches readily take credit; when either or both increase, those same groups point to the deficits of their opponents and argue that more funding for their favored strategies is required. As will become apparent in the review that follows, the paths into crime and drug abuse are numerous and varied; as such, less dogmatism and greater pragmatism and eclecticism would help us respond to these problems more appropriately. In addition, we should recognize that demand for drugs emanates from the tastes and preferences of millions of individuals and families and that such aspects of life are largely beyond the control of government (Caulkins and Reuter 1997). Consideration of this very simple fact might have cautioned the writers of the Anti-Drug Abuse Act of 1988 against declaring that it was the “policy of the U.S. Government to create a drug-free America by

1995.” As we will see below, despite spending hundreds of millions of dollars on the war on drugs between 1988 and 1995, drug use among adolescents increased during this period.

Given that there are different paths into drug use and crime, and hence, different subgroups of criminals and drug users, the nature of the drug-crime relationship varies, depending on which subgroup is analyzed. Over the past 30 years, the country has witnessed various drug epidemics (for a discussion of the stages of development of drug epidemics see Chaiken 1993), and, with each, the nature and rates of drug-related crimes have changed. Early descriptions of the drug-crime connection were drawn from studies of criminality among narcotic addicts (e.g., Nurco et al. 1984; McGlothlin, Anglin, and Wilson 1978) or alcoholics (e.g., Collins 1981) or studies of drug use among criminal offenders (e.g., U.S. DOJ, BJS 1983; Weissman, Katsampes, and Giacinti 1974). This research supported the notion that alcohol use is associated with violent crime, whereas other drug (especially heroin) use is associated with the commission of property crime. Proponents of the alcohol-violence model emphasized the psychopharmacological effects of alcohol intoxication as the cause for violent behavior (Collins 1981; Pernanen 1981). The drug-property crime model was based principally on the notion that heroin (and other drug) addicts commit property crimes in order to secure money for drugs (Nurco et al. 1984; McGlothlin, Anglin, and Wilson 1978). Interestingly, proponents of the alcohol-violence model did not give weight to the fact that a substantial proportion of inmates convicted of property crimes were under the influence of alcohol at the time of the offense (U.S. DOJ, BJS 1994a). Similarly, drug-property crime model proponents have only recently given weight to the fact that heroin addicts are often involved in violent crimes, typically committed over drug possession and sale (see Goldstein 1985). As powder cocaine and crack cocaine became popular in the 1980s, the nature of the drug-crime relationship changed. Rates of violent crimes, especially those related to drug distribution and marketing, increased markedly and the term “systemic violence” was applied to this new type of drug-related crime (Goldstein 1985). At the same time, possibly due to the lower cost of crack compared with heroin and powder cocaine and the higher profit in drug dealing, rates for property crime decreased. Recent data from the Arrestee Drug Abuse Monitoring program (U.S. DOJ, National Institute of Justice [NIJ] 1998) indicate that cocaine use among arrestees is dropping for younger cohorts and suggest a gradual aging out of the cocaine-using population. Hence, the question becomes whether these recent changes in patterns of drug use will again lead to changes in the drug-crime relationship.

The objective of this chapter is to review the literature on the drug-crime nexus. Within the limitations of space allowed, all relevant literature cannot be covered, and the reader is referred to several excellent reviews for greater detail (e.g., Graham, Wells, and West 1997; Fagan 1990; Chaiken and Chaiken 1990; Harrison 1992a; Osgood 1994; Miczek et al. 1994; Parker and Auerhahn 1998; Watters Reinerman, and Fagan 1985; White 1990, 1997a, 1997b).¹

For the purpose of this chapter, drug use refers primarily to the use of illicit substances such as marijuana, cocaine, and heroin, and crime refers primarily to predatory crime that encompasses both violent and property crime (see Chaiken and Chaiken 1990). Our focus is on the relationship between drug use and crime rather than on drug use alone. Thus, illicit drug use and drug possession, which are crimes in and of themselves, are not considered here to be crimes unless as part of research findings specifically linking them to the commission of other types of crime. To include as “crime” any offense involving only the use or sale of drugs would be misleading, as it would inflate the drug-crime relationship.

In the section that follows, we discuss the drug-crime relationship in a historical context. Next, we examine the key methodological issues involved in empirically understanding the drug-crime connection. We then trace trends in drug use and crime over time, using national and city-level datasets. After this, we present general theoretical models of the drug-crime connection and review the empirical research that supports and refutes these models. The chapter concludes with a brief summary of the research and a discussion of its implications for the next century.

Historical Context

During the 19th century, substances such as opiates and cocaine were regarded as medications and freely sold in drugstores, grocery stores, and traveling medicine shows in the form of pharmaceutical products such as cough medicines (Musto 1991). The primary consumers of these medicines were upper- and middle-class women, and the other major drug user group was Chinese immigrant railroad workers who smoked opium. Initial attempts at drug control focused on domestic regulation such as the registration of those dispensing drugs and the prohibition of adulteration and mislabeling (U.S. DOJ, BJS 1992a). The Federal legislation that fundamentally altered the approach to U.S. drug control policy was the Harrison Act of 1914. The Harrison Act required strict accounting for the importation and dispensing of opiates and cocaine—these measures to be accomplished by registration of those involved in the drug trade and the imposition of a tax at each point of transfer. Initially,

physicians were permitted to prescribe and administer cocaine and opiates to patients, but decisions of the Supreme Court in 1919 and 1925 made this practice illegal and held that the Federal Government had ultimate control over the dispensing of these substances. As Musto (1991) observes, the severity of Federal laws concerning the sale and possession of opiates and cocaine gradually increased from the 1920s through the 1940s. Further, in 1937, marijuana was placed under the same controls as opiates and cocaine.

Drug use declined throughout the 1940s and 1950s, although organized crime began to import large quantities of heroin into the United States during the latter decade. A number of drug epidemics affected major urban centers during this time as well (Musto 1991; Rouse and Johnson 1991). Among the general population and in academic circles, drug use was largely considered a marginal activity. This, of course, changed in the late 1960s and 1970s when use of drugs (especially marijuana and hallucinogens) became more commonplace among American youth. During the 1960s, the proportion of the population reporting having used marijuana increased from 4 to 24 percent, and the heroin addict population grew from 50,000 to 500,000 (DuPont 1978). At the same time, rates of both property and violent crime began to rise dramatically. In response, President Johnson declared a war on crime in 1965, and the drug-crime relationship was re-identified by the 1967 President's Commission on Law Enforcement and Administration of Justice (Inciardi 1992). Four years later, President Nixon declared a war on drugs, and legislation of the early 1970s established Federal agencies in the areas of law enforcement (e.g., the Drug Enforcement Administration [DEA]), prevention and treatment (e.g., the Special Action Office for Drug Abuse Prevention [SAODAP]), and research (e.g., the National Institute on Drug Abuse [NIDA]). The Federal drug abuse prevention and law enforcement budget rose from \$81 million in 1969 to nearly \$690 million in 1975 (Cline 1974). During the early 1970s, more Federal drug control dollars were committed to prevention and treatment than to law enforcement, but starting in 1975, the latter began consuming a greater proportion of the budget (Cline 1974; Goldberg 1980).

As marijuana use increased and law enforcement efforts intensified, arrests for possession soared, and many of the arrestees were middle-class youths. This, combined with growing scientific debate over the supposed dangers of marijuana, led to calls for a de-escalation of the war on drugs (U.S. DOJ, BJS 1992a). As early as 1972, the National Commission on Marihuana and Drug Abuse (1973) concluded that the health effects of marijuana were minimal and that legalization of the drug should be considered. In 1973, the State of Oregon initiated a policy of decriminalization when it reduced to a civil violation the possession of less than 1 ounce of marijuana. By 1978, 10 other States had enacted

From the early 1920s to the early 1970s, the U.S. prison population remained relatively stable at about 110 per 100,000 population; however, it more than tripled over the next two decades, to 411 per 100,000 by 1995. Changes in drug-related sentencing practices, such as differential penalties for possession of powder and crack cocaine, were credited with much of this increase.

similar legislation (Single 1989). Although President Ford continued the drug control policies of the previous two administrations, acceptance that the drug problem could not be totally eliminated began to emerge, and interest in drug control issues began to fade at the Federal level (Goldberg 1980). The most fundamental break with the policies of the previous two decades occurred, however, under the Carter administration of the late 1970s. The Carter administration endorsed the decriminalization of possessing small amounts of marijuana, noting that penalties against use of the drug should not do more harm to individuals than use of the drug itself (a theme picked up by "harm reduction" advocates 20 years later). Following a peak in 1979, adolescent use of illicit drugs began to decline (see following text for details). Moreover, evidence suggested that those States that had liberalized their marijuana laws did not experience greater use, although they did enjoy substantial savings on drug enforcement activities (Single 1989).

This reversal in the type of drug control policies followed in the United States since the Harrison Act of 1914 was short lived. Government interest in and spending on drug control policies increased substantially during the latter part of the 1980s with the enactment of two pieces of legislation—one under the Reagan administration (the Anti-Drug Abuse Act of

1986) and one under the Bush administration (the Anti-Drug Abuse Act of 1988). Following the theme of the "Just Say No" campaigns of the early 1980s, there was a return to the idea of "zero tolerance" and a commitment to a "drug-free America." Anything that opposed these fundamental principles in any way—such as talk of "improper use" or "good" versus "bad" drugs in education programs—was not to be tolerated (see U.S. Department of Education 1987). In 1985, the total Federal drug control budget stood at \$2.8 billion. By the early 1990s, it was in the region of \$11 to \$13 billion a year (Executive Office of the President, Office of National Drug Control Policy [ONDCP] 1994). All segments of the Nation's drug control apparatus benefited from this increased expenditure—international interdiction, domestic law enforcement and corrections, research and development, prevention, and treatment—although the former two (known collectively as "supply reduction") garnered two-thirds of the budget.

Although there was some initial expectation that there would be a shift from law enforcement and interdiction to prevention and treatment (so-called “demand reduction”) under the Clinton administration, this failed to materialize (Caulkins and Reuter 1997; Gorman 1993). Demand reduction received the same proportion of the Federal drug control budget (34 percent of \$16 billion) in 1998 as it did in 1992 (Executive Office of the President, ONDCP 1998a, table 5). Perhaps the biggest changes in drug control policy introduced in the latter part of the 1990s were the formation of less utopian goals and objectives and the move toward using empirical data to assess agency performance in terms of reaching these goals and objectives. For example, the 1998 National Drug Control Strategy proposes to reduce prevalence of drug use among adolescents by 50 percent and crime associated with drug trafficking and use by 30 percent by the year 2007. (Executive Office of the President, ONDCP 1998b). A system of data collection to track progress toward these goals is described, and the performance of the single State agencies and their grantees will now be judged by an empirical yardstick (Executive Office of the President, ONDCP 1998c). Whether the performance targets described in the Strategy are attainable is a matter of debate (as is the issue of whether they can be accurately tracked given available datasets), but they are clearly more realistic than the goal of “creating a drug-free America” described in the legislation of 10 years earlier.

Given the nature of U.S. drug control policy over the past two decades, it is hardly surprising that drug-related arrests, prosecutions, and imprisonment have increased dramatically during this period. Harrison (1992a) has shown that drug-related arrests nearly quadrupled between 1980 and 1989, and this increase was disproportionately high in relation to arrests for nondrug offenses. The growing number of drug-related arrests, together with increases in the number of defendants receiving custodial sentences and in the length of these sentences, has led to immense prison overcrowding. From the early 1920s to the early 1970s, the U.S. prison population remained relatively stable at about 110 per 100,000 population; however, it more than tripled over the next two decades, to 411 per 100,000 by 1995 (Blumstein 1995a; Haney and Zimbardo 1998). During the same period, the prison population became younger and disproportionately African-American. Between 1985 and 1995, the incarceration rate for African-American men rose from 3,544 to 6,926 per 100,000. Changes in drug-related sentencing practices, such as mandatory minimums, the three-strikes law, and differential penalties for possession of powder and crack cocaine, were credited with much of this increase (Blumstein 1995a; Haney and Zimbardo 1998). The increase in drug arrests and prosecutions fundamentally changed the composition of the imprisoned population in the country, with 60 percent of Federal prisoners incarcerated for drug-related crimes by early 1990s.

Concern with such issues as prison overcrowding and the apparent racial bias in drug arrests, prosecutions, and sentencing has led in recent years to the development of an alternative to drug prohibition (or “zero tolerance”) in drug policy analysis. This approach is generally referred to as “harm reduction.” It is employed in some European countries and in Australia, and it has vocal advocates in the United States. According to this perspective, the primary goal of U.S. drug policy—total prohibition of use—is unrealistic and unattainable, and specific objectives, such as preventing the entry of drugs into the country, lowering demand among youths, and reducing the health and social costs of drug use, have simply not been achieved (Reuter and Caulkins 1995; Weingardt and Marlatt 1998). Indeed, harm reduction proponents argue that current prohibitionist policies not only fail to reduce drug use and associated problems, but they generate additional unintended negative consequences, such as neighborhood destabilization and increased violence by dealers (Rasmussen and Benson 1999; Reuter 1997). As an alternative, they propose that the fundamental objective of drug control policy should be to limit the harm caused by drugs and that reducing prevalence, although one means of pursuing this end, should have no special status or overarching role (Reuter and Caulkins 1995; Reuter 1997).

As MacCoun and colleagues observe, nobody, with the exception of some libertarians, seriously advocates relaxing drug laws to create a “free market” for substances such as cocaine and heroin (MacCoun, Reuter, and Schelling 1996). Rather, harm reduction strategies fall within a range of options that lie between legalization and full prohibition and generally entail some type of prescription-based model (e.g., the medical use of marijuana), regulatory model (e.g., that drugs be available to those with an appropriate license), or decriminalization model (e.g., drug use remains illegal, but enforcement negligible and penalties minimal) (MacCoun, Reuter, and Schelling 1996; Weingardt and Marlatt 1998). Although often thought of as primarily relevant to drug treatment (e.g., in the form of modalities such as needle exchange programs, methadone maintenance, and relapse prevention), harm reduction techniques that are relevant to prevention and law enforcement have been described in the literature (Hellawell 1995; Midford, McBride, and Munro 1998). In each case, it is argued that resources should be targeted at those who generate the most cost from their drug use and who have the most intractable problems (e.g., addicts and drug-using offenders), and less emphasis should be placed on casual drug users, who are least likely to harm themselves or others (Reuter and Caulkins 1995). In this sense, harm reduction makes the most sense for those who are unconcerned about drug use per se, but who are worried about the social costs associated with use and abuse, including violence and property crime (Caulkins and Reuter 1997). This is a fundamentally different mindset than the one that has dominated U.S. drug control policy since the Harrison Act.

This brief overview of historical trends in policy and some of the major themes of recent years sets the stage for an examination of the empirical evidence pertaining to the drug-crime relationship. We begin with a discussion of some key methodological issues.

Methodological Issues

There are numerous methodological issues involved in studying the alcohol/drug use-crime nexus. Here we discuss some of those related to definitions, measures, and samples (for additional issues, see Fagan 1993a; White 1990, 1997a).

Definitions

There is a lack of uniformity in definitions of crime, drugs, and drug-related crime. In some studies, crime refers to murder, rape, robbery, theft, and burglary—acts that fall within most people's definitions. In other studies, however, crime refers to relatively trivial acts, such as taking a few dollars from one's parents (this is especially true in studies of juveniles; Stark 1987). Some studies include drug use and/or drug selling in delinquent behavior scales, which obviously confounds the relationship between drug use and delinquency/crime scales (Carpenter et al. 1988). The meaning of "drug use" can also vary widely from one study to the next—ranging from having a sip of alcohol or a puff on a marijuana joint, to symptoms of physical dependence and withdrawal.

The term "drug-related crime" also means different things in different studies. For example, drug-related homicide can include murders related to drug distribution, murders committed while using drugs, murders committed in the act of a crime to get money for drugs, or murders that simply occur in high-drug-use neighborhoods. Which category is included in rates of drug-related homicide varies from one jurisdiction to another, so data from different studies using official statistics are often incompatible. Also, in some official statistics and research reports, alcohol is included as a drug when estimating the level of drug-related crime, whereas in others, it is not. In addition, certain types of events—e.g., a robbery to get money for groceries because the grocery money was spent on drugs, or a man beating his wife for taking his drugs—may or may not be counted as a drug-related crime (Miczek et al. 1994). Given this lack of agreement and consensus in these domains, one must be cautious in making comparisons across studies of alcohol/drug use and crime.

Measures

Most of the survey research on the alcohol/drug-violence connection has relied on self-reports, which generally are accepted as reliable and valid indicators of both criminal behavior and alcohol and drug use. In addition, self-reports provide a more direct, sensitive, and complete measure of various deviant behaviors than do measures based on official law enforcement and institutional records (for greater detail and supporting studies, see Elliott, Huizinga, and Menard 1989; Farrington et al. 1996; for a discussion of measurement errors inherent in official records, see Fagan 1993a). Of course, there are many caveats concerning the use of self-report data, especially with long-term drug users who may lack the inability to remember past events, misunderstand many questions, and conceal certain behaviors and/or exaggerate others (Chaiken and Chaiken 1990). Likewise, offenders may exaggerate the role of alcohol and drugs prior to an offense in order to justify their behavior. Moreover, for ethnic/racial minorities, the validity of responses may be especially troublesome (De La Rosa and Caris 1993; Hindelang, Hirschi, and Weis 1981).

Recent data comparing drug testing results with self-reports among offender populations have cast some doubt on the validity of the latter technique of data collection. For example, in one study of a sample of high-risk adolescent males, only about one-third of those with positive hair-sample analyses for cocaine reported recent use, while half reported any lifetime use of the drug (Lipton and Johnson 1998). Data from the Drug Use Forecasting (DUF) system indicate that about one-half to two-thirds of those who test positive in urinalysis also acknowledge recent drug use in self-reports (Harrison 1992b). Besides the DUF survey, few studies collect blood, breath, saliva, or urine samples to determine alcohol and drug levels. When drug testing is done, it reflects use at the time of arrest and not at the time of the offense (and the two events can obviously be separated by some time). Homicide studies using autopsy results collect data only from victims, and in cases in which a victim did not die immediately, drugs may have been metabolized out of the system by the time of the autopsy (for details, see Roizen 1993). Finally, the accuracy of drug tests depends on the type and quantity of the drug consumed, how recently it was used, and the individual's capacity to metabolize the drug (Golub and Johnson 1999).

Measurement of alcohol and drug use varies greatly across studies: some studies measure acute use, and others measure chronic use; some measure drug-related problems, and others measure dependence. Indeed, different measures of the same phenomenon (e.g., dependence) can differ in terms of whom they identify as having a problem, even among clinical populations (Gorman et al. 1989). Also researchers often measure frequency of use, not quantity—yet

quantity (especially “bingeing”) may be more important to criminal behavior, especially for violence (Collins 1993). Similarly, there is a lack of consistency in crime measures across studies, including crime rates per year, frequency, crime days, and heterogeneity of crimes (for details, see Chaiken and Chaiken 1990; see McBride and McCoy 1982; Roizen 1993; and White 1990 for additional issues in definitions and classification schema). Finally, because drug use and delinquency are constantly changing behaviors, measures that tap a static point may not represent the true behavior pattern (see Blumstein, Farrington, and Moitra 1985).

Samples

Some researchers rely on captive samples in prisons or in treatment programs to study the drug-crime relationship. Such samples have the advantage of providing a pool of subjects who exhibit high frequencies of the behaviors of interest; however, the relationships observed may not be generalizable to the general population and may overestimate the degree of co-occurrence. For example, research indicates that heavy drug users and problem drinkers are more likely to be arrested and that high-rate offenders who do not get caught are usually not frequent drug users (Chaiken and Chaiken 1990; Collins 1986). Further, incarcerated offenders may be the most frequent offenders, the most indigent, or the least skilled, all of which might place them at greater risk for apprehension and incarceration (Harrison 1992b).

On the other hand, samples drawn from general populations have limited numbers of individuals engaging in drug use or crime. Many general surveys of youths are administered in schools and therefore omit dropouts who are known to have higher rates of drug use and delinquency (Fagan and Pablon 1989). Similarly, the National Household Survey on Drug Abuse (NHSDA) misses institutionalized (e.g., hospitalized, incarcerated) members of the population, individuals living on military bases, and transients (Harrison 1992b)—all of whom can bias prevalence estimates. In addition, studies of general populations make it difficult to test theories about the causes of serious delinquency or drug abuse.

A final key issue with regard to sampling problems is that studies of ethnic/racial groups have been hindered by small nonrandom samples. Moreover, differences within ethnic groups (e.g., Mexican-Americans versus Puerto Ricans) are often ignored (for greater detail, see De La Rosa and Caris 1993). The differences between these subgroups in their patterns of drug use and the commission of crime can be as great as the differences between large heterogeneous ethnic/racial groups (e.g., whites versus Latinos).

The issues raised here provide an overview of the conceptual and methodological ambiguities that characterize alcohol/drug-crime literature. The following review of the literature should be interpreted within these limitations.

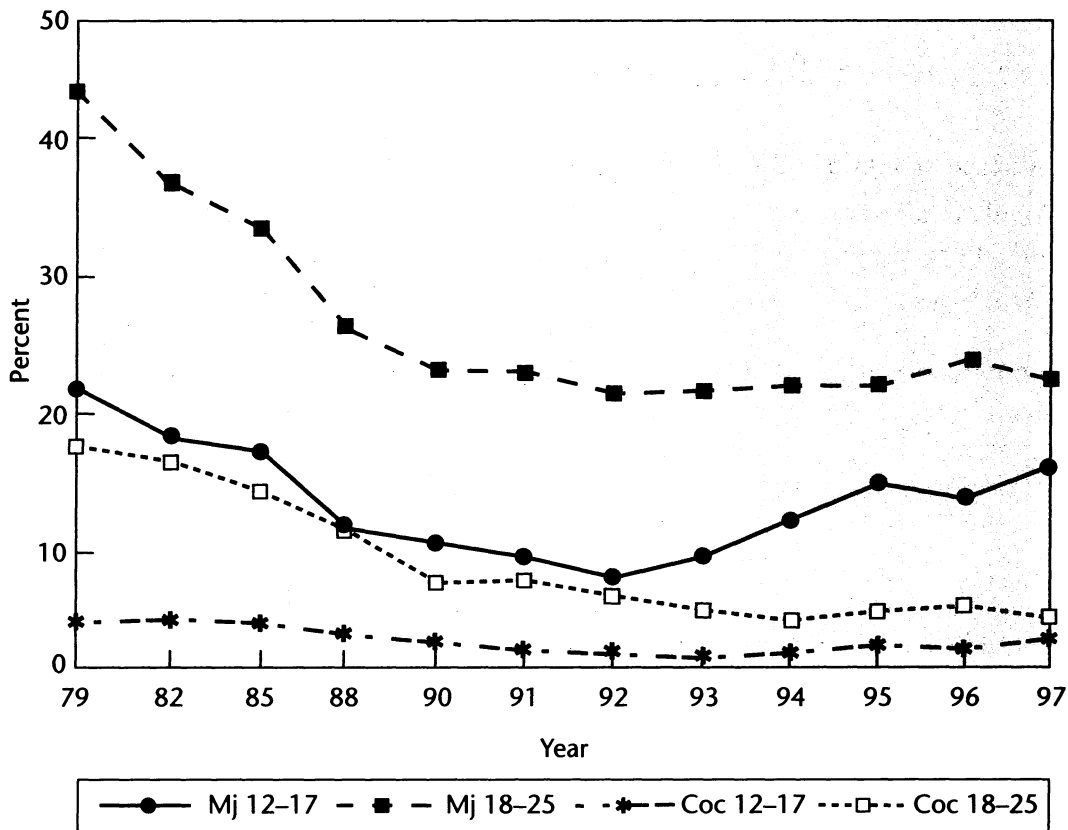
Trends in Drug Use and Crime

National trends in drug use

Trends in adolescent drug use in the United States can be tracked from data collected through two large-scale national surveys: the Monitoring the Future (MTF) study, which reports continuous annual data from 1975 onward, and NHSDA, which was conducted every 3 years between 1976 and 1988 and annually after 1990. NHSDA also collects data from adults. Both surveys show that among adolescents, illicit drug use (which was primarily marijuana use) peaked in 1979, with 39 percent of 12th graders in MTF reporting use during the previous 30 days (Johnston, O'Malley, and Bachman 1998) and 18.5 percent of 12- to 17-year-olds in NHSDA reporting use during a similar period (U.S. Department of Health and Human Services 1999). By 1992, reported use in these age groups was down to 14 percent in the former survey and 6 percent in the latter. Since then, however, illicit drug use (especially marijuana use) among adolescents has steadily increased, with 26 percent of high school seniors in 1997 reporting use during the past month (Johnston, O'Malley, and Bachman 1998). Rates of heroin use have remained relatively stable over time. For cocaine use, there is some differentiation by age. Cocaine use rates for youths peaked around 1979, remained stable until about 1985, declined thereafter, and have shown a slight increase since the mid-1990s. In contrast, cocaine use rates for adults peaked around 1985. These trends and differences by age group are evident in exhibit 1, which shows national trend data in annual prevalence of marijuana and cocaine use from NHSDA for young adults (ages 18–25) and adolescents (ages 12–17) between 1979 and 1997.

Other data also support declines in drug use among adults. First, data from SmithKline Beecham Clinical Laboratories indicate that only 5 percent of the American workforce tested positive for drugs in 1997 and 1998, compared with 9 percent in 1991. These data indicate an increase in positive tests for marijuana and a decrease for cocaine (Center for Substance Abuse Research [CESAR] 1997, 1998a). Second, according to the Drug Abuse Warning Network (DAWN) data, the number of national emergency room visits directly related to drug use declined by 6 percent from 1994 (the peak year since the data were first collected in 1978) to 1996 (CESAR 1998b).

Exhibit 1. Trends in annual prevalence of marijuana (Mj) and cocaine (Coc) use by age for adolescents and young adults, 1979-97



Source: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration 1999.

Levels of drug use have also been studied within offender populations. Rates of drug use by incarcerated offenders, as well as among arrestees identified in the DUF system, are somewhat inconsistent with rates reported in the general population with respect to cocaine use (Harrison 1992a). Among the jail and arrestee populations, there were large increases in cocaine use in the mid- to late 1980s while these rates were declining in the general population. Yet, Harrison (1992b) controlled for year of admission to prison and concluded that, although rates of drug use are much higher in the prison population compared with the general population, the trends are similar. In addition, she observed that differences between the general population and those involved with the criminal justice system may reflect a lag effect. That is, the criminal population with higher rates of drug use and related problems may be the last to give up or

The hardcore members of the cocaine/crack generation were primarily born between 1955 and 1969, and the peak years for initiation of crack occurred from 1985 to 1988. The new "blunt generation" includes individuals born after 1970, and their drug of choice is marijuana.

moderate consumption. Thus, as rates of drug use change in the general population, they will impact on special subcultures more slowly (see Skog 1991).

Using data from the Arrestee Drug Abuse Monitoring program, Golub and Johnson (1999) identified three distinct generations of drug-using arrestees in Manhattan from 1987 through 1997. Members of the "heroin injection generation" were born in the years 1945–54 and began injecting in the 1960s and 1970s, with peak years of initiation occurring between 1965 and 1969. Their numbers have substantially dwindled due to a maturing out of drug use, successful treatments, and death (especially from AIDS). Members of the "cocaine/crack generation" were born in the period 1940–69, with peak use years occurring between 1987 and 1997. Few of those born in 1955 or later injected heroin; however, many of the older heroin injectors added crack or cocaine to their list of drugs of choice. The hardcore members of the cocaine/crack generation were primarily born between 1955 and 1969, and the peak years for initiation of crack occurred from 1985

to 1988. The new "blunt generation" includes individuals born after 1970, and their drug of choice is marijuana. Most have not used heroin or crack, probably because of problems observed among the older users of these drugs. Although many of the older cohorts had used marijuana at some time in their lives, few had marijuana in their urine samples when they were arrested, compared with the younger blunt generation.

Such changes in the popularity of different types of drugs may account, at least in part, for changes in the drug-crime relationship. For example, it is entirely plausible that differences in the way that heroin and crack are used, along with differences in their psychoactive properties, account for the greater number of crimes attributed to crack users (especially violent crimes). That is, the high from the heroin injection lasts several hours and many addicts do not continually use all day long. In contrast, the crack high lasts only about 5 minutes and users tend to use multiple times a day, requiring additional purchases. The latter user is going to be more active and motivated to commit predatory crime in order to buy and use the drug several times a day (Johnson et al. 1994).

National crime trends

According to the National Crime Victimization Survey (NCVS), property crime rates underwent an uninterrupted decrease from the early 1970s onward (Rand, Lynch, and Cantor 1997). Indeed, in 1997 there were fewer property crimes than in any other year since the 1973 inception of the survey (Rand 1998). In contrast, the Uniform Crime Reports (UCR) data show an increase in property crime during the 1970s, a decline during the early 1980s followed by an increase until the end of the decade, and a subsequent decline during the 1990s. With regard to violent crime, NCVS data show that from 1973 to 1994, rates vacillated: they were stable from 1973 through 1977, then increased and peaked in 1981, then decreased through 1986, and then increased from 1986 to 1993 to nearly peak levels. Since 1994, they have decreased steadily, again reaching an all-time low in 1997. UCR data again indicate a steady increase since the 1960s, with a decline commencing in the 1990s (U.S. DOJ, BJS 1989–91, 1992b, 1993, 1994b, 1995–98).

Despite important differences, both datasets indicate substantial declines in violent crime during the past few years. The murder rate in 1997 was the lowest the country had seen since 1967 (Snyder 1998). Although juvenile homicide arrest rates increased substantially between 1988 and 1993, they too declined 39 percent between 1993 and 1997 (Snyder 1998). The juvenile arrest rate for all violent crime peaked in 1994 (after a 60-percent increase from 1988), but started to decline thereafter. In contrast, juvenile arrests for property crime have remained steady, and juvenile arrests for drug abuse violations have increased 82 percent during this same period.

A report contained in the 1997 UCR describing trends in drug-related arrests between 1980 and the early 1990s observed that the Nation experienced its highest level of drug arrests in 1995, when an estimated 1.5 million people were arrested for selling, manufacturing, or possessing illegal substances (U.S. DOJ, Federal Bureau of Investigation 1997). Between 1990 and 1995, marijuana-related arrests increased by 80 percent. Accompanying this was a change in the age and racial composition of arrestees: juvenile drug-related arrest rates increased by 132 percent (compared with 28 percent for adults) and, although drug-related arrest rates increased for all ethnic groups, the proportional increases for blacks and other races were greater than those for whites (98 percent, 96 percent, and 69 percent, respectively).

It should also be noted that such aggregate data obscure trends within subgroups of the population that may have fundamental policy implications. For example, the increases in homicide rates identified between the mid-1980s and early 1990s were attributable primarily to increases for youths (Blumstein, 1995b).

During this period, when the homicide rate was relatively stable among young adults, the homicide rate doubled for 18-year-olds and increased by 138 percent for 16-year-olds. At the same time, there was a large increase in juvenile drug arrests, especially among nonwhites in urban areas. Further, during this time, the use of guns in juvenile murders doubled. The increases in juvenile homicide offenders have been linked to increases in gun use, as well as the increase of youths involved with crack distribution (see next section; Blumstein 1995b).

Drug/crime nexus in specific cities

We were interested in closely examining trends in drug use in relation to trends in crime. Harrison (1992b) argues that, because of local differences, trends in drug use and crime should not be assessed at a high level of aggregation (e.g., at a national or regional level). Thus, the two national epidemiological drug use surveys, MTF and NHSDA, were not suitable because the former only disaggregates data to four regions of the country, whereas the latter does not disaggregate at all. Also, subgroups of the population are omitted and/or under-represented in these surveys, including some subgroups (e.g., school dropouts and those in institutions) that are likely to include high numbers of both drug users and drug users involved in crime (Harrison 1992b). We therefore decided to extract drug use data from the NIJ DUF program (renamed the Arrestee Drug Abuse Monitoring [ADAM] program in 1997), which uses urinalysis and self-report data to assess recent drug use among arrestees in more than 20 cities in the United States (U.S. DOJ, NIJ 1998, 1989–97).

DUF/ADAM is not a nationally representative sample, but rather is limited to large metropolitan areas. The trends observed in these data may not be relevant to suburban or rural areas or to urban areas not included in the project. Also, the data come from arrestees, a subgroup of these cities that is most representative of their underclass (i.e., those who are poor, uneducated, and involved in a constellation of problem behaviors). Again, the pattern of use among this subgroup may not be representative of the general population (Harrison 1992b). Finally, it should be noted that most crimes do not result in arrest and that arrest is more likely to occur in the case of serious crime (e.g., robbery, assault, and burglary) and when a criminal is a frequent drug user (Chaiken and Chaiken 1990; Nurco 1998). Thus, DUF/ADAM data may not be generalizable to all types of criminals.

Despite these limitations, DUF/ADAM data have the advantage of being reported at the level of specific cities, rather than at a larger level of aggregation. For purposes of assessing violent and nonviolent crime in the same cities, two datasets were available—NCVS and UCR. We chose the latter, as it has

the advantage of including homicides (a major crime of interest), although we were aware that UCR, too, has distinct limitations primarily because it contains only crimes reported to the police (see other volumes in this series for details on each dataset).

Since its inception in 1988, 24 cities have contributed data to the DUF/ADAM project. Exhibit 2 presents a summary of DUF/ADAM drug use data among male arrestees and UCR crime data from 17 of these cities. Five cities (Atlanta, Chicago, Denver, Kansas City, and Omaha) were excluded from the present analysis, as there were 2 or more years of missing data from either of the datasets. Two other cities (Indianapolis and Manhattan) were excluded, as comparable geographic units are not reported in DUF/ADAM and UCR. Urinalysis data are presented, as many more arrestees test positive by this method than by self-report.

Exhibit 2. Correlations between and among drug use and crime

Birmingham	.06	-.73	.79	-.17	-.81	.26	-.42	-.57	.24
Cleveland	-.37	-.76	.46	-.67	-.27	.10	-.80	-.34	.50
Dallas	.57	-.62	.82	-.87	.26	.72	-.57	.67	.89
Detroit	.82	-.67	-.33	-.67	.20	.32	.05	.15	.18
Fort Lauderdale	.15	-.10	.55	-.50	.14	.37	-.74	-.60	-.41
Houston	-.10	-.12	.14	-.61	-.42	.23	-.06	-.25	.91
Los Angeles	.79	.23	.89	-.69	.53	.27	-.47	.82	.62
Miami	-.14	-.33	.86	-.87	.18	.70	-.76	.23	.79
New Orleans	-.27	-.17	.65	-.52	-.36	-.13	-.42	-.35	.47
Philadelphia	-.28	-.72	.25	.08	.08	-.61	-.48	-.53	.35
Phoenix	.72	-.57	-.09	-.60	-.77	-.64	-.02	.29	.07
Portland	.40	.18	.87	.37	.08	.29	.69	.28	.55
St. Louis	.29	-.02	.64	-.31	.09	.76	.51	.47	.76
San Antonio	.26	-.37	.46	-.66	.61	.76	-.29	.92	.07
San Diego	.89	.05	.27	-.61	.27	.58	.29	.99	.91
San Jose	.50	-.77	-.82	.65	-.53	-.77	-.72	.55	.98
Washington, D.C.	.73	-.89	.05	-.37	.05	.12	.40	-.59	-.46
Average	.30	-.38	.38	-.41	-.04	.20	-.22	.13	.44

Note: Coc=cocaine, Her=heroin, Mj=marijuana, Viol=violent crime, and Prop=property crime.
 Sources: U.S. Department of Justice, Bureau of Justice Statistics, 1989-91, 1992b, 1993, 1994b, 1995-98; U.S. Department of Justice, National Institute of Justice, 1998; U.S. Department of Justice, National Institute of Justice 1989-97.

We were interested in whether there was any association between drug use and crime within each of these 17 cities. Because data were available for only 10 years for each city, there were insufficient data points from which to conduct sophisticated analyses. Instead, we simply treated each year as an "individual" and looked at the correlations among DUF/ADAM positive rates for marijuana, cocaine, and heroin and UCR property and violent crime rates.

What is especially noteworthy about the data is the lack of consistency across cities. That is, for each relationship there are both positive and negative and large and small correlation coefficients. For example, the association between violent crime and cocaine use is 0.76 in St. Louis and San Antonio, whereas it is -0.77 in San Jose. Yet, this relationship is generally positive in most cities, indicating that both cocaine use and violent crime were increasing and decreasing in the same years. In comparison, the relationship between marijuana use and violence is primarily negative and relatively strong, and the relationship between violent crime and heroin use is weaker and less consistent. The relationships between drug use and property crime are consistent with those for violent crime. That is, the association of property crime with cocaine use is mostly positive; with marijuana use, mostly negative; and with heroin use, largely inconsistent. In most cities, there is a negative association between marijuana and cocaine, indicating that, as use of one increased, use of the other decreased. The association between cocaine and heroin, however, is generally positive, indicating relatively similar trends in use. Finally, the average correlation between property crime and violent crime is positive. However, coefficients range from -0.60 to 0.99 . Again, it should be noted that positive coefficients indicate a correlative but not necessarily causative relationship.

Exhibit 3 presents data from these cities in terms of trends in violent crime (i.e., homicide, rape, robbery, and assault) and property crime (i.e., larceny, burglary, and auto theft), compared with trends in testing positive for marijuana, cocaine, and heroin. This exhibit further illustrates the findings shown in exhibit 2 and demonstrates that the trends vary greatly from city to city. For example, the trends in cocaine and violence are almost parallel in Phoenix and St. Louis, but there is no relationship in San Jose. Similar discrepancies are noted between property crime and heroin trends. In San Diego and San Antonio, the trends look parallel, but in Birmingham, Fort Lauderdale, and Washington, D.C., the trends move in the opposite direction. In order to understand why these differences exist, one might need to separately examine the intricacies of the drug markets in each city. For some cities, such as Philadelphia, the drop in cocaine use throughout the 1990s was drastic, in some it was gradual, and in some it was erratic. By contrast, in some cities, such as Fort Lauderdale and Phoenix, cocaine use increased during this same period.

There are also some trends that are fairly consistent across cities. For example, in most cities, marijuana use sharply declined between 1990 and 1991 and has been increasing since then. However, in seven of the cities, the 1997 marijuana rates were higher than those of the late 1980s, in six they were lower, and in four they were about the same. Further, testing positive for marijuana surpassed testing positive for cocaine somewhere between 1993 and 1996 in most cities. However, the rates for the former never reached those of the latter in Fort Lauderdale, Houston, Los Angeles, Miami, and New Orleans, and both rates were almost equal in Phoenix and Portland. The peak in violence rates also varied across cities. Almost half the cities experienced peaks from 1990 to 1992, whereas an equal number experienced peaks in 1993 through 1995. Yet, New Orleans experienced its peak in 1996, and for Phoenix and Philadelphia, the trend was relatively flat throughout the 1990s.

In Birmingham, Cleveland, Dallas, and Detroit, about half of the arrestees tested positive for cocaine in 1988. Yet, in this same year, the first two cities had almost half the violent crime rate of the latter two. Similarly, in 1997, about 50 percent of the arrestees in Fort Lauderdale, Miami, and New Orleans tested positive for cocaine, but the violence rate was almost twice as high in Miami as in the other two cities. Further, in 1988 the rate of heroin use was similar in Birmingham, Cleveland, and Dallas, yet the rate of property crime in Dallas was twice as high as in Cleveland and almost four times as high as in Birmingham. Also in 1997, the rate of property crime in Miami was greater than in New Orleans, yet the heroin rate was about four times greater in the latter than the former. Thus, these variations across cities and rates suggest that drug use alone cannot explain much of the variation in either violent or property crime.

The DUF/ADAM study also includes data on methamphetamine use, and recent evidence indicates that it is increasing among arrestees (trend data are not shown but are available from the authors upon request). In 1995 overall, 6 percent of adult arrestees tested positive for methamphetamine compared with 41 percent for cocaine, 28 percent for marijuana, 8 percent for opiates, and about 2 percent for PCP (Feucht and Kyle 1996). According to the most recent data, use of methamphetamine is highest in San Diego, San Jose, Phoenix, Portland, and

Thus, the data on trends across cities indicate that there is no uniform association between any type of drug use and any type of crime. Rather, the trends vary greatly from place to place. The fact that the associations are sometimes positive and sometimes negative and that there are vast discrepancies across cities further supports the notion that the relationship between drug use and crime is complex.

Omaha—all of which report 10 percent or more of both male and female arrestees testing positive (U.S. DOJ, NIJ 1998). In fact, in San Diego (where 40 percent of males and 42 percent of females tested positive) and San Jose (where 18 percent of males and 25 percent of females tested positive), use of methamphetamine is equal to or greater than use of cocaine and opiates. As exhibit 3 shows, levels of violent and property crime remain low in these two cities relative to other DUF/ADAM sites, although the increase in methamphetamine use might change the nature of the drug-crime relationship in the near future (especially the drug-violence connection).

Thus, the data on trends across cities indicate that there is no uniform association between any type of drug use and any type of crime. Rather, the trends vary greatly from place to place. The fact that the associations are sometimes positive and sometimes negative and that there are vast discrepancies across cities further supports the notion that the relationship between drug use and crime is complex. Below we discuss theoretical explanations for this complex relationship.

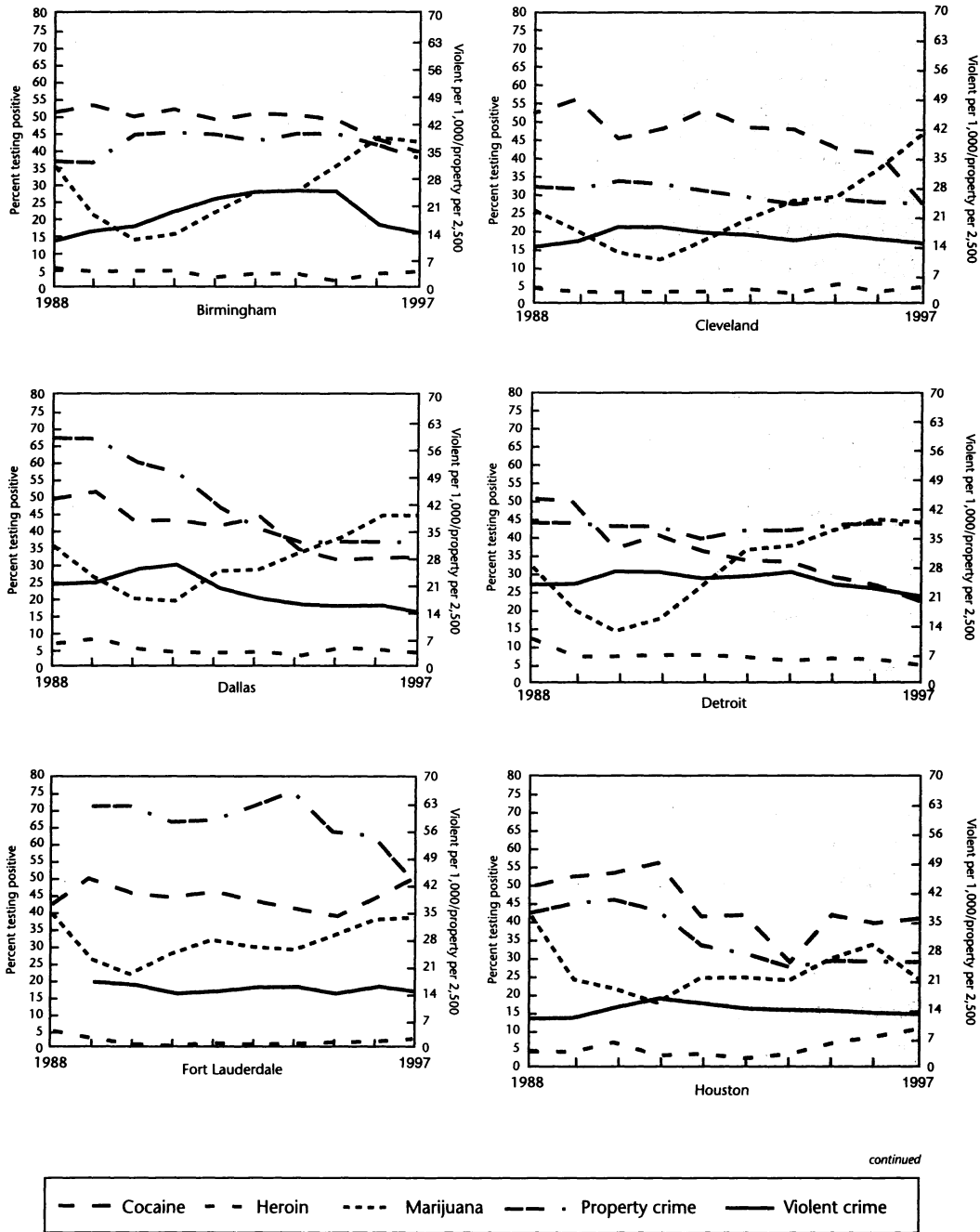
Theoretical Issues

There are three basic explanatory models for the relationship between alcohol/drug use and crime: (1) substance use leads to crime, (2) crime leads to substance use, and (3) the relationship is either coincidental or explained by a set of common causes (see White 1990). Each model may apply to different subgroups of the population of substance-using criminals or to different incidents of alcohol/drug-related crime. In the next section, we briefly describe the models and, following these descriptions, we present empirical data that both support and refute them.

Substance use leads to crime

One causal model posits that alcohol and drug use lead to crime because of the psychopharmacological properties of drugs, the economic motivation to get drugs, or the systemic violence associated with the illegal drug market (Goldstein 1985). The *psychopharmacological model* proposes that the effects of intoxication (including disinhibition, cognitive-perceptual distortions, attention deficits, bad judgment, and neurochemical changes) cause criminal (especially violent) behavior (Collins 1981; Fagan 1990). In addition, chronic intoxication may also contribute to subsequent aggression and crime, due to factors such as withdrawal, sleep deprivation, nutritional deficits, impairment of neuropsychological functioning, or enhancement of psychopathologic personality disorders (Virkkunen and Linnoila 1993). The *economic motivation model* assumes that drug users need to

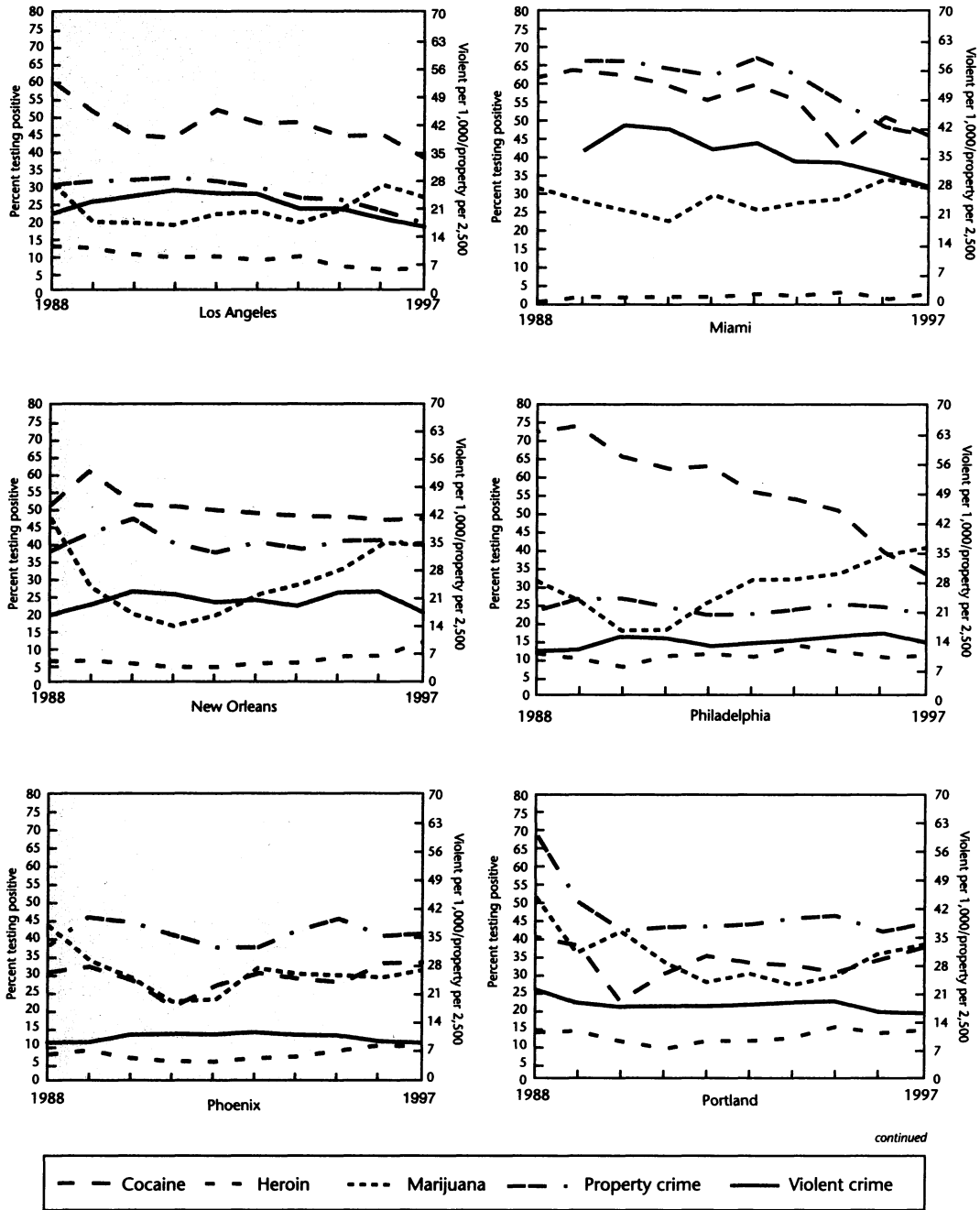
Exhibit 3. Trends in drug use and crime rates by city



continued

Note: Violent crime rate is per 1,000 population; property crime rate is per 2,500 population.
 Sources: U.S. Department of Justice, Bureau of Justice Statistics 1989-91, 1992b, 1993, 1994b, 1995-98; U.S. Department of Justice, National Institute of Justice 1998; U.S. Department of Justice, National Institute of Justice 1989-97.

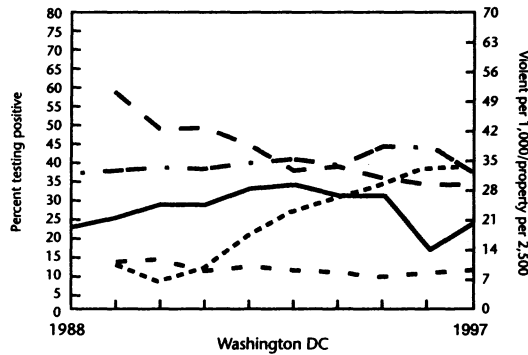
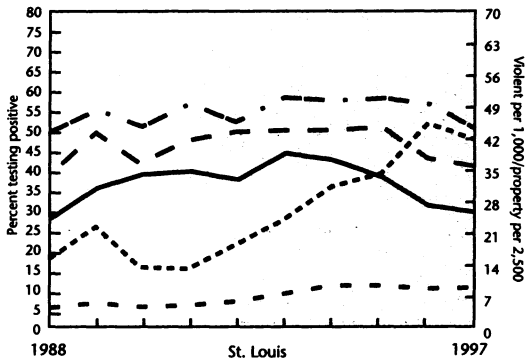
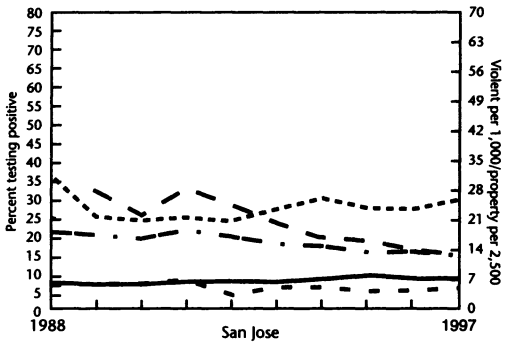
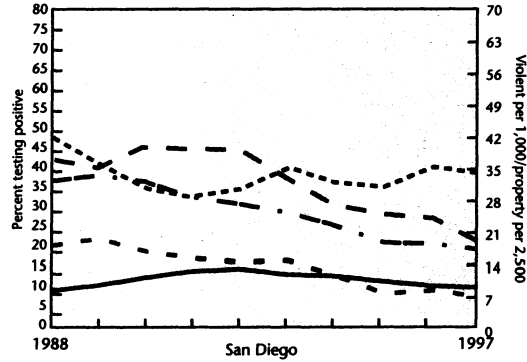
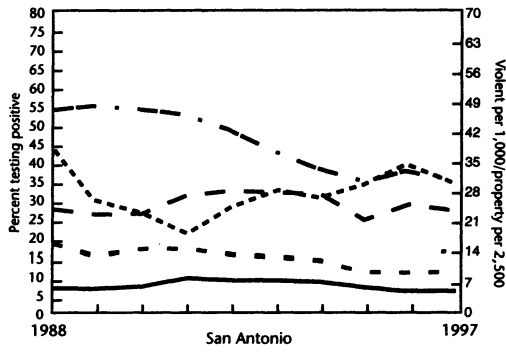
Exhibit 3 (continued)



Note: Violent crime rate is per 1,000 population; property crime rate is per 2,500 population.

Sources: U.S. Department of Justice, Bureau of Justice Statistics 1989-91, 1992b, 1993, 1994b, 1995-98; U.S. Department of Justice, National Institute of Justice 1998; U.S. Department of Justice, National Institute of Justice 1989-97.

Exhibit 3 (continued)



Cocaine
 Heroin
 Marijuana
 Property crime
 Violent crime

Note: Violent crime rate is per 1,000 population; property crime rate is per 2,500 population.
 Sources: U.S. Department of Justice, Bureau of Justice Statistics 1989-91, 1992b, 1993, 1994b, 1995-98; U.S. Department of Justice, National Institute of Justice 1998; U.S. Department of Justice, National Institute of Justice 1989-97.

generate illicit income to support their drug habit. Thus, they engage in crimes such as robbery, burglary, and prostitution to get drugs or the money to buy them.

During the 1980s, attention began to focus on the *systemic model* (Goldstein 1985), which posits that the system of drug distribution and use is inherently connected with violent crime. Systemic types of crimes surrounding drug distribution include fights over organizational and territorial issues, enforcement of rules, punishments of and efforts to protect buyers and sellers, and transaction-related crimes (such as robberies of dealers or buyers, assaults to collect debts, and resolution of disputes over quality or amount) (Miczek et al. 1994). In addition, there is often third-party violence, such as bystander shootings or assaults on prostitutes who sell drugs. Further, drug markets can create community disorganization, which, in turn, affects the norms and behaviors of individuals who live in the community. Such community disorganization may be associated with increases in crime that are not directly related to drug selling (Blumstein 1995b; Fagan and Chin 1990; Skogan 1990).

Crime leads to substance use

This model is based on the assumption that deviant individuals are more likely than nondeviant individuals to select or be pushed into social situations and subcultures in which heavy drinking and drug use are condoned or encouraged. According to this explanation, involvement in a criminal subculture provides the context, the reference group, and the definitions of a situation that are conducive to subsequent involvement with drugs (White 1990). For example, rather than the need for a drug compelling an individual to commit robbery, the income generated from a robbery might provide the individual with extra money to secure drugs and therefore place the individual in an environment that supports drug use (Collins, Hubbard, and Rachal 1985). It has also been suggested that several aspects of the professional criminal lifestyle are conducive to heavy drinking and drug use, such as working periodically, partying between jobs, being unmarried, and being geographically mobile (Collins and Messerschmidt 1993). In addition to subcultural and lifestyle explanations, it has been proposed that deviant individuals may use drugs in order to self-medicate (Khantzian 1985) or to give themselves an excuse to act in a deviant manner (Collins 1993).

It is also possible that both of the above models are correct and that the relationship between substance use and crime is reciprocal. That is, substance use and crime may be causally linked and mutually reinforcing and, thus, drinking and drug use may lead to more criminal behavior and criminal behavior may lead to more drinking and drug use (Collins 1986; Fagan and Chin 1990). For example, when an addict has an easy opportunity to commit robbery, he or she will commit

it and then buy drugs with the money gained, not out of a compulsion but rather as a consumer expenditure. Conversely, when the need for drugs is great, users will commit crimes to get money to buy drugs (Goldstein 1981; see also Chaiken and Chaiken 1990).

The relationship is due to common causes

The common cause model postulates that substance use and crime do not have a direct causal link. Rather, they are related because they share common causes (such as genetic or temperamental traits, antisocial personality disorder, parental alcoholism, and poor relations with parents) (White 1990; White, Brick, and Hansell 1993). For example, young males account for a disproportionate share of crime and are also the heaviest drinkers and drug users; being male is the common link (whether due to biological or social factors). In addition, subcultural norms may reinforce both criminal behavior and substance use. That is, certain subcultures (e.g., youth gangs) may promote both crime and drug use as proof of masculinity, which would spuriously inflate the relationship between these two behaviors (Fagan 1990; see Gorman and White 1995 for a review of peer influences on drug use and delinquency).

In addition to such individual-level and interpersonal-level influences, drug use and crime may have common environmental and situational causes. Research shows, for example, that rates of violent crime and delinquency are high in neighborhoods that are poor, densely populated, racially segregated, and composed of a transient population (Bursik 1988; Sampson, Raudenbush, and Earls 1997). Social disorganization and lack of social capital appear to be the crucial mechanisms linking these structural characteristics to crime (Skogan 1990). Exposure to drugs and sustained drug use are also more common among residents of disadvantaged and disorganized neighborhoods, probably because the illicit drug market is concentrated in such communities (Ensminger, Anthony, and McCord 1997). Available research does not indicate the exact nature of the relationship between drug use, crime, and social deprivation and disorder, although it is fairly clear that these factors interact in many poor urban environments to create a spiral of decline in which each problem is amplified over time (Skogan 1990).

For example, young males account for a disproportionate share of crime and are also the heaviest drinkers and drug users; being male is the common link (whether due to biological or social factors).

Certain types of places and situations also generate both greater rates of drug use and crime. For example, crime rates are high when and where people (especially young males) are drinking, such as at bars and sports stadiums, and at night and on weekends (Fagan 1993b). Proponents of the routine activities perspectives argue that bars are crime hot spots because they bring together motivated offenders and suitable targets in the absence of effective guardianship (Roncek and Maier 1991). Thus, situational factors such as location, access, and type of clientele contribute to a spurious relationship between alcohol use and crime (for greater detail, see Fagan 1993b).

In the following section, we examine empirical data that support or refute these theoretical models.

Empirical Research on the Association Between Drug Use and Crime

Degree of association

In a meta-analysis of cross-sectional studies examining the alcohol-violence relationship, Cohen et al. (1994) found significant, although very modest, effect sizes for both acute and chronic associations. They also found that the associations between alcohol and violent crime were weaker than those between alcohol and nonviolent crime. The relationships were stronger in criminal and psychiatric samples than in general population samples. Further, when studies controlled for confounding variables, the alcohol-violence correlation was reduced substantially. Thus, Cohen and colleagues concluded that the association between alcohol and violence probably represents a relationship that is confounded by other factors such as sociodemographic and personality characteristics (see also Lipsey et al. 1997). The meta-analysis identified weak associations between alcohol use and violence across time: the average correlation between Time 1 alcohol use and Time 2 violence was 0.01, and between Time 1 violence and Time 2 alcohol use, 0.09 (suggesting that violence was more strongly related to later alcohol use than alcohol use was to later violence).

A similar meta-analysis on marijuana use and delinquency by Derzon and Lipsey (1999) found that individuals who used marijuana were more likely than those who did not to concurrently engage in nonviolent delinquency. However, prior marijuana use did not increase the risk of later violent or nonviolent delinquency. On the other hand, prior delinquency was related to later marijuana use. The strongest relationships between marijuana and aggression occurred in early adolescence, but the analysis did not find a consistent relationship between marijuana and aggressive delinquency after early adolescence. Derzon

and Lipsey (1999) concluded that use of marijuana does not establish a developmental trajectory to aggressive behaviors.

Studies examining the association between various stages of drug use and delinquency have reported a high degree of synchrony in the progression. Abstainers and alcohol-only users are most likely to be nondelinquents; compared with only alcohol users, those who use both alcohol and marijuana are more likely to be delinquent; and those who progress to the use of other drugs, compared with those who do not, are most likely to also progress to involvement in more serious forms of delinquency (Elliott, Huizinga, and Menard 1989; Fagan et al. 1987; Fagan, Weis, and Cheng 1988; White, Johnson, and Garrison 1985). Yet, these types of analyses have also indicated that there are several heterogeneous groups of adolescents; for some, drug use and delinquency are closely related, and for others they are independent of each other (see Fagan et al. 1987; White, Pandina, and LaGrange 1987; White and Labouvie 1994)

In addition, these typological studies indicate that the strength of the associations between substance use and delinquency depends on the severity of the delinquency and the types of substances used (Fagan et al. 1988), as well as the age, sex, and nature of the sample examined (Huizinga and Jakob-Chien 1998). Further, some studies report an asymmetry in the relationship (for a review, see White 1990). White et al. (1999) found that delinquency increased as drug use became more serious, but that drug use was not related to seriousness of offenses. Among both males and females, Huizinga and Jakob-Chien found that many serious offenders were not serious drug users and that most did not have drug problems. In contrast, as many as two-thirds of the male problem drug users were also serious offenders. Huizinga and Jakob-Chien (1998) argued that the fact that most serious delinquents are not serious drug users calls into question the existence of a single-problem behavior syndrome. In contrast, White, Pandina, and LaGrange (1987) found that the majority of serious delinquents were also serious drug users, whereas only one-third of the serious drug users were also serious delinquents. The difference in findings between these two studies probably reflects variations in the nature of samples and historical changes in drug use.

In examining the degree of association between crime and drug use, it must be recognized that only a small group of individuals are criminal offenders and heavy drug users. For example, in a nationally representative sample of youths, it was found that less than 5 percent of all youths reported committing serious crimes and using hard drugs.

Statistics on the rates of alcohol use by offenders at the time of an offense provide strong support for the alcohol-violence relationship.

Although the rates vary greatly across studies, they generally indicate that more than half of all homicides and assaults are committed when the offender, victim, or both have been drinking.

Studies of adult populations also support a progressive relationship between frequency of drug use and amount of crime, especially during periods of addiction versus nonaddiction (Chaiken and Chaiken 1990) (see the section on the economic motivation model). For example, Johnson and colleagues (1985) found that among street opiate users, daily users, compared with nondaily users, committed more drug-related and nondrug-related crimes. In addition, Inciardi and Pottieger (1998) found that heroin users, compared with other criminal offenders, committed more crimes and more serious types of crimes and were involved in a greater variety of offenses.

In examining the degree of association between crime and drug use, it must be recognized that only a small group of individuals are criminal offenders and heavy drug users. For example, in a nationally representative sample of youths, it was found that less than 5 percent of all youths reported committing serious crimes and using hard drugs. This small group accounted for approximately half or more of all serious offenses and 60 percent of all occasions of hard drug use (Johnson et al. 1986). Similarly, among

street opiate users, criminal offenders who committed at least one crime per week also committed the majority of all crimes, regardless of type (Lipton and Johnson 1998). Inciardi and Pottieger (1991) found that 254 crack-using youths in Miami accounted for more than 200,000 criminal offenses in 1 year. It should be noted, however, that 61 percent of these offenses were drug related (e.g., drug possession and distribution).

Statistics on the rates of alcohol use by offenders at the time of an offense provide strong support for the alcohol-violence relationship. Although the rates vary greatly across studies, they generally indicate that more than half of all homicides and assaults are committed when the offender, victim, or both have been drinking (see Collins and Messerschmidt 1993; Roizen 1993). About 40 percent of adults in local jails and State prisons in 1996 reported committing a violent crime, and about one-third of that group reported committing a property crime while drinking (Greenfeld 1998). In one study, however, though more than 50 percent of the assaultive offenders reported drinking at the time of their offense, 59 percent of those drinking did not think that drinking was relevant to the commission of the crime (Collins and Messerschmidt 1993). In a study of incarcerated offenders, Collins and Schlenger (1988) concluded that it was acute

episodes, rather than chronic patterns of alcohol use, that better predicted violent offending. Yet, a recent study by Zhang, Wieczorek, and Welte (1997) found that although usual drinking pattern was not related to the prevalence of assault, once other moderating variables were controlled, usual drinking pattern and acute use of alcohol preceding an assault were both independently related to frequency of assault.

In 1996, more than one-third of jail inmates reported that they were under the influence of drugs at the time of their offense (Harlow 1998). The primary drugs were marijuana/hashish and cocaine/crack. Among local jail inmates in 1996, 60 percent were under the influence of alcohol only (25 percent), drugs only (20 percent), or both (16 percent) at the time of their offense. The overall percentages were the same for property and violent crimes, although more violent crime than property crime was committed under the influence of alcohol alone (27 percent versus 18 percent), and more property crime than violent crime was committed under the influence of only drugs (21 percent versus 14 percent) (Harlow 1998). Based on DUF data, Valdez and colleagues (Valdez, Yin, and Kaplan 1997; Valdez et al. 1995) reported that the relationship between arrests for aggressive crime and substance use was in the opposite direction for alcohol compared with illicit drugs. Arrests for aggressive crimes were more strongly related to reports of frequent alcohol use than to testing positive for illicit drugs. In fact, persons who tested positive for illicit drugs were less likely to be involved in aggressive crime than those who tested negative. Kouri and colleagues (1997) found that 53 percent of State prison inmates in Massachusetts reported that their drug use played a significant role in the commission of the crime for which they were incarcerated. Further, almost all the inmates had been incarcerated at some time for a crime related to drug use.

Across various cities in the United States, about one-fourth to one-half of all homicides are drug related (U.S. DOJ, BJS 1992a). Drug-related homicides appear to involve young (late teens through twenties) men, especially African-Americans and Hispanics (Blumstein 1995b; U.S. DOJ, BJS 1992a). Further, about half of all victims of homicide have drugs (usually cocaine or a cocaine metabolite) in their body (U.S. DOJ, BJS 1992a). Spunt and colleagues (1994) interviewed prison inmates in New York State and found that about one-fifth of all homicides were reported to be related to alcohol use, although in about half of these cases, the respondent was also high on another drug (usually marijuana). Inciardi (1990b) found large variations across cities in terms of increases and decreases in homicide rates from 1985 through 1989. He thus concluded that homicide rates are not associated with rates of crack use and crack distribution and that the association between crack use and violence varies by location.

Victimization studies also provide empirical support for the alcohol-violence relationship, although the rates vary considerably. PERNANEN'S (1991) study in Thunder Bay, Canada, showed that 54 percent of all violent incidents (which included nonserious types of violence such as pushing and shoving) were alcohol-related. In contrast, data from NCVS indicate that only 28 percent of all violent crimes are alcohol related (Gramckow et al. 1995).

Gender, age, and ethnic differences in the nature of the drug-crime relationship have been observed. Rates of alcohol-related violent offenses appear to be higher for males than for females and highest in the 20- to 30-year-old age group, as compared with younger or older samples (Collins and Messerschmidt 1993). Gender by age interactions are also noteworthy (Nunes-Dinis and Weisner 1997). Although some research indicates that drug-related violence is increasing for women, there is debate as to whether rates are actually increasing or whether official labeling of females is increasing (Goldstein 1989). In a recent study of arrestees in California, gender was not a significant predictor of violent offenses when alcohol and drug use and demographic variables were controlled (Nunes-Dinis and Weisner 1997). Further, this study found no significant differences between men and women in the proportion charged with violent, drug-related, or alcohol-related offenses.

The data on ethnic differences in the drug-crime association are inconsistent and indicate complex gender-by-ethnicity interactions (Collins and Messerschmidt, 1993). WIECZOREK, WELTE, and ABEL (1990) reported that more males than females, and more whites than blacks, were under the influence of alcohol at the time they committed a homicide. In contrast, the rate of those under the influence of illicit drugs was consistent across genders and races. Valdez and colleagues (1995) identified a moderating effect of ethnicity on the drug-crime relationship among male DUF arrestees in San Antonio. Whites were more likely to be involved in aggressive crimes than Mexican-Americans. Further, the combined use of alcohol and drugs was more strongly associated with aggressive crimes for Mexican-Americans than for whites, whereas the use of alcohol alone was more strongly associated for whites (see also Valdez et al. 1997). For both whites and Mexican-Americans, heavy drinkers were just as likely to commit property crimes as violent crimes. Although several researchers have found ethnic differences in the association between drug use and crime, others have not (e.g., Inciardi and Surratt 1998).

Research on arrested adolescent offenders indicates that they also report being under the influence of alcohol and drugs when they commit crimes (Collins 1993). In 1993, 8 percent and 10 percent, respectively, of all youths in custody in State institutions reported that they were under the influence of

only alcohol when they committed a violent or a property crime (U.S. DOJ, BJS 1994a). Similarly, 12 percent committed a violent offense and 17 percent a property crime while under the influence of only drugs. Approximately one-fourth committed property or violent crimes while under the influence of both drugs and alcohol.

In contrast, data from community samples of adolescents do not provide strong support for a direct association between alcohol/drug use and violence (Carpenter et al. 1988; White 1997b). In a national sample of adolescents, Elliott, Huizinga, and Menard (1989) examined self-reports of the use of alcohol and drugs immediately prior to commission of index offenses. They found no relationship between acute drug use and property or violent crime. For alcohol, however, they found a definite relationship for sexual assaults and a probable relationship for aggravated assaults. However, the association between alcohol use and violent crime was stronger in young adulthood than in adolescence, suggesting that the nature of the relationship may change over the life course. After a review of the literature on alcohol, drugs, and violence among youths, Osgood (1994) concluded that there was little evidence that substance use makes an independent contribution to adolescent violence.

In addition to individual-level analyses, support for an alcohol-violence association comes from macro-level studies of the relationship between alcohol availability and rates of violence. Rates of homicide and other forms of violence have been related to alcohol availability and per-capita consumption in international as well as in U.S. State comparisons, although the strength of the relationship is reduced when other variables, such as poverty, are controlled (Parker 1993). Further, efforts to reduce drinking (e.g., by increasing the tax on alcohol) have been shown to decrease violent crime (Cook and Moore 1993).

It is generally recognized that the relationship between alcohol availability and crime is best studied using small geographic areas no larger than cities (Scribner et al. 1999). Using city-level data, Parker and Rebhun (1995) found that increases in alcohol availability helped explain why the homicide rate tripled between 1960 and 1980. They found that the homicide rate was positively related to beer consumption and negatively related to increases in the minimum drinking age. A recent study of cities in Los Angeles County found that 70 percent of violent crime could be explained by a community's socio-demographic characteristics, but that an additional 7 percent of the variability in violent crime could be explained by alcohol outlet densities (Scribner, MacKinnon, and Dwyer 1995). However, these findings were not entirely replicated in a study of more than 200 New Jersey municipalities: Alcohol outlet densities did not significantly contribute to violent crime rates after controlling

for the same sociodemographic characteristics (Gorman et al. 1998). In a further study focused on the relationship between alcohol outlet density and violence within a single New Jersey municipality, alcohol outlet density was found to be the best predictor of violent crime (Speer et al. 1998). Alcohol outlet density was also a significant predictor of neighborhood variations in the level of violent crime in studies conducted in several other U.S. cities (Alaniz, Cartmill, and Parker 1998; Roncek and Pravatiner 1989; Roncek and Maier 1991; Scribner et al. 1999; Sherman, Gartin, and Buerger 1989).

Overall, this research suggests that moderate restrictions on alcohol availability may reduce violence (Cook and Moore 1993). However, Lipsey and colleagues (1997) argue that the existing studies do not establish a causal relationship because the findings have been equivocal, there is uncertainty about what other variables should be controlled, and the full range of possible confounding factors has not been examined. Moreover, even if a causal relationship between outlet density and rates of violence were to be established, the underlying mechanism would also need to be specified before policies could be developed. For example, the association between alcohol availability and violent crime may be due to the effects of alcohol on individuals' psychological functioning: The more outlets there are in a community, the greater the number of people drinking and therefore subject to the cognitive effects of alcohol (see section on the pharmacological model). Alternately, it may be the drinking context—principally, drinking in public places—that explains the association between alcohol availability and violence. From this perspective, alcohol itself plays a relatively minor role; rather, it is the features of bars and other drinking places that matter (for a discussion of these features, see Graham, Schmidt, and Gillis 1996).

Temporal ordering

Studies of developmental trajectories of drug use and crime indicate very different patterns. That is, onset of delinquency peaks in mid-adolescence and then declines dramatically after age 18. On the other hand, illicit drug use usually begins in mid-adolescence, and initiation of some substances continues into young adulthood (Elliott, Huizinga, and Menard 1989; Kandel and Logan 1984). Elliott and colleagues (1989) found that rates for serious delinquency decreased by 70 percent as their sample aged from adolescence to young adulthood. On the other hand, rates for polydrug use increased by 350 percent during this same time period.

Researchers have examined the temporal order between various stages of drug use and delinquency. Elliott and colleagues (1989) found that, among subjects who initiated delinquency and polydrug use, minor delinquency almost always

came first and, in fact, no one initiated marijuana or polydrug use before minor delinquency. Alcohol use came second, although a substantial percentage of subjects initiated Index offenses prior to alcohol use. In general, however, alcohol use was followed by marijuana use, then Index offending, and, finally, polydrug use. Among subjects who initiated both marijuana use and Index offending, Index offending was more likely to precede marijuana use than vice-versa. Elliott and colleagues (1989) note, however, that whereas delinquency is more likely to influence the onset of drug use than the reverse, serious drug use (repeated polydrug use) is more likely to influence the maintenance of serious delinquency. In other words, if drug use does influence delinquency, it may be by reducing the probability of terminating, rather than increasing, the probability of initiating delinquent behavior (Chaiken and Chaiken 1990; Shannon 1998).

Research on the long-term association between drug use and crime presents mixed findings. Farrington (1995) found that males who were aggressive in childhood or adolescence were more likely to be heavier drinkers and drug takers in adulthood. He suggested that this continuity is probably not specific to aggression, but rather it is part of a general continuity in antisocial behavior from childhood to adulthood. White, Brick, and Hansell (1993) found that, among adolescent males, early aggressive behavior compared with alcohol use was a better predictor of later alcohol-related aggression. Their findings suggested that males who engage in alcohol-related aggression are aggressive from early adolescence and behave aggressively whether or not they use alcohol. Alternatively, a study of juvenile offenders in Finland found that those juveniles who had arrests for drunkenness were more likely to have arrests for violent crimes 5 to 10 years later (Virkkunen 1977). In another study of adolescent offenders, Dembo and colleagues (1991) also found that alcohol use predicted violent offending approximately 1 year later.

Recently, White and Hansell (1998) examined the acute and long-term associations between alcohol, marijuana, and cocaine use and aggression from early adolescence into adulthood. Overall, their results suggested that the long-term and acute relationships between aggression and drug use vary by drug type and stage of the life cycle. For example, whereas alcohol use was not significantly related to later aggressive behavior at any age, both marijuana and cocaine use in middle to late adolescence were significantly related to increased aggression in adulthood. In complement, Kaplan and Damphousse (1995) found that drug use in adolescence predicted increased aggression in adulthood, although the predictive utility was weak. Kandel, Simcha-Fagan, and Davies (1986) found that among males, early delinquency predicted later drug use, but early drug use did not predict later delinquency. For females they found that illicit drug use in adolescence predicted delinquency in adulthood. A recent structural

equation model test using high-risk samples found that current alcohol and cocaine use had a direct effect on increased criminality, whereas marijuana use did not (Yu and Williford 1994). In addition to these drug type differences, longitudinal studies suggest that there are gender and age differences that affect the long-term associations between drug use and delinquency (Friedman et al. 1996; White and Hansell 1996; White et al. 1999).

In sum, longitudinal studies that have examined the temporal associations between drug use and criminal behavior report mixed findings. Most studies have found that early aggression and delinquency predict later alcohol problems, yet the findings are equivocal as to whether early alcohol use predicts later aggression. Many studies have found that early drug use predicts later aggression and crime. Further, longitudinal research indicates that initiation into delinquency precedes drug use; however, changes in drug use affect changes in criminal behavior. Although the data indicate that, for most people, aggressive behavior precedes initiation into drug use, it does not mean that acute or chronic use of drugs does not lead to subsequent violent behavior. The data supporting a causal relationship will be reviewed separately for the psychopharmacological, economic motivation, systemic, and common cause models.

Is the Association Between Drug Use and Crime Causal?

The psychopharmacological model

The psychopharmacological model has gained greater support in the alcohol literature than in literature about other drugs. Support for this model comes from laboratory studies of animals and humans. Although studies of animals demonstrate that low to moderate doses of alcohol increase aggressiveness, there are many problems in generalizing from animal aggression to human violence (see Miczek et al. 1994). Here we discuss only studies of humans.

Controlled laboratory studies have consistently found that acute intoxication by alcohol (below sedating levels) is related to aggression when the subject is provoked (Bushman 1997). However, it has also been demonstrated that the relationship between alcohol use and aggression is moderated by subject characteristics (e.g., gender, aggressive tendencies, cognitive abilities), experimental design conditions (e.g., provocation, nonaggressive response alternative, peer pressure, normative standards), and beverage characteristics (e.g., dose, type) (Gustafson 1993; Pihl, Peterson, and Lau 1993; Ito, Miller, and Pollock 1996; Chermack and Giancola 1997). In a recent meta-analysis, Bushman (1997) reported that increased aggression under conditions of alcohol intoxication in

the laboratory cannot be explained by either physiological disinhibition of alcohol or alcohol expectancies. Rather, alcohol increases aggression by causing changes within the person that increase the risk for aggression, such as reduced intellectual functioning, reduced self-awareness, and inaccurate assessment of risks. These same alcohol-induced changes may put a person at risk for nonaggressive crimes, although less research and theorizing has been applied to psychopharmacological explanations for property crime. Numerous biological and neuropsychological mechanisms have been proffered to explain how alcohol use increases the risk of violence (for greater detail, see White 1997a; Miczek et al. 1994; Pihl, Peterson, and Lau 1993; Fagan 1990; Parker and Auerhahn 1999). (For a review of laboratory studies and theoretical explanations for the association between alcohol and aggression, see Bushman 1997; Ito, Miller, and Pollock 1996; Chermack and Giancola 1997; Lipsey et al. 1997; Parker and Rebhun 1995. For a review of the methodological issues in laboratory research, see White 1997a.)

The psychopharmacological explanation for the drug-violence association has largely been refuted in the literature with regard to heroin and marijuana, but it has received strong support with regard to barbiturates and tranquilizers. (For an extensive review of specific drug effects on aggression in animals and humans, see Miczek et al. 1994; see also Parker and Auerhahn 1998). Laboratory studies indicate that marijuana and opiates have the opposite effect of alcohol in that moderate doses temporarily inhibit aggression and violence, although withdrawal from opiates increases aggression. There is some research to indicate that chronic use of marijuana, opiates, and amphetamines increases the risk of violent behavior (Miczek et al. 1994). No conclusive evidence supports a direct association between cocaine use and violence (Miczek et al. 1994). As well, there has been no evidence (except anecdotal and small samples) that acute use of PCP (phencyclidine) and LSD (lysergic acid diethylamide) is associated with violent behavior, except when use enhances already existing psychopathology (Miczek et al. 1994; see also Fagan 1990; Parker and Auerhahn 1998). Similarly, cocaine and amphetamine use can increase paranoia, which might result in violence. However, the intoxicating effects of all of these drugs account for very little drug-related violent crime. It is also possible that drug and alcohol use may interact to affect violent behavior (Denison, Paredes, and Booth 1997).

In a study of drug-related homicides in New York City, only 14 percent were classified as psychopharmacological. Whereas all homicides committed while the offender was under the influence of alcohol but no other drug were classified as psychopharmacological, few such cases involving the use of another drug without alcohol were so classified (Goldstein et al. 1989). Fendrich and colleagues (1995) found that the association between alcohol use and homicide

held true for both juvenile and adult offenders, with about one-third of the offenders reporting that they had used alcohol prior to committing the offense.

As in other areas, there are important gender, ethnic, and age differences found in the research. Studies that have examined the role of alcohol and other drugs in violent crime indicate that the psychopharmacological model predominates for females and that the predominant drug is alcohol (Spunt et al. 1990). Further, men who are killed by women often have alcohol in their blood at the time of death (Parker and Auerhahn 1999). Interestingly, alcohol and drugs appear to play a greater role in homicides of intimates than nonintimates among women than with men (Parker and Auerhahn 1999). Alcohol is also the predominant drug in the psychopharmacological model for males, although the systemic model is predominant (Spunt et al. 1990) (see later discussion). Goldstein (1989) found that Hispanics, compared with whites and blacks, had the strongest association between alcohol use and psychopharmacological violence, although alcohol was the drug most often associated with psychopharmacological violence for all three ethnic groups.

The psychopharmacological model has received little support in the adolescent literature (Carpenter et al. 1988; White 1990). However, in one study of adolescents who were adjudicated for a violent crime, more than half said that taking alcohol or drugs contributed to their violent acts, and almost half of them had used either alcohol or drugs immediately prior to their adjudicated violent offense (Hartstone and Hansen 1984). Note, however, that the rates were higher for other drugs than for alcohol. Further, in a study of incarcerated adolescents, it was found that more than two-thirds of the incidents of physically assaultive crime involved acute drug intoxication (Tinklenberg et al. 1981). Almost all of the cases of acute intoxication involved alcohol either alone or in combination with another drug. Similarly, a large majority of the drug-related sexually assaultive crimes involved alcohol use. On the other hand, marijuana use was underreported in offenses against persons. It is possible in both these studies that arrested juveniles overreported alcohol or drug use prior to their offense in order to justify their behavior.

In sum, the psychopharmacological model appears relevant for explaining a potential causal relationship between alcohol and violence among adults but little of the relationship between drugs and crime. However, after a thorough review of the existing literature, Parker and Auerhahn (1998) concluded that the social environment is a more powerful contributor to violence than are the pharmacological effects of any drug, including alcohol.

Economic motivation model

Support for the economic motivation model comes from literature on heroin addicts, which indicates that raising or lowering the frequency of substance use among addicts raises or lowers their frequency of crime, especially property crime (e.g., Nurco et al. 1984, Chaiken and Chaiken 1990; Anglin and Perrochet 1998). In addition, criminal activity is significantly greater following addiction to drugs than before addiction (Nurco et al. 1988). Although heroin use may not initiate crime, addiction is often a key point in the acceleration of an existing criminal career (Chaiken and Chaiken 1990). For those already criminally involved prior to addiction, the addiction increases their criminal activities only somewhat. However, for those not seriously involved with crime prior to addiction, there is a much sharper increase in criminal activity related to addiction status. Thus, for addicts with little prior criminal involvement, the data support an economic motivation model; for those with heavier criminal involvement, the data support a common cause model (Nurco 1998).

Containment of heroin use through treatment and close supervision appears to lead to dramatic reductions in both drug use and crime (Inciardi and Pottieger 1998). But recent research suggests that there are individual differences in the effects of treatment on reducing crime. Nurco and colleagues (1988) found that a reduction only occurred for individuals with previously low levels of criminal activity. Those individuals with criminally derived incomes (i.e., those who did not commit crimes only to get money for drugs) prior to treatment, remained criminally active after treatment (see also Lipton and Johnson 1998). Further, there appear to be ethnic/racial differences in the effects of treatment on crime reduction (Nurco et al. 1988).

All of this research points to the need to differentiate among different types of drug users when studying the drug-crime association. Some addicts are criminal prior to, and regardless of, their drug use, although their crime rates may increase during heightened periods of addiction. Eliminating their drug use would probably reduce, but not necessarily eliminate, their criminal behavior. Other addicts become involved in crime as a result of their addiction. Eliminating their drug use would probably also eliminate their criminal behavior. Finally, there are some addicts who avoid criminal activities (except, of course, illegal drug possession and use) altogether (see Byqvist and Olsson 1998; Nurco 1998; Waldorf 1998). Reducing drug use among this group would have no effect on rates of crime. In fact, most drug users, and even some drug addicts, do not commit crimes, especially when one excludes drug dealing (Chaiken and Chaiken 1990; Hunt 1990). Just as there are many types of criminals and noncriminals among drug users, there are also many types of drug users and nonusers among criminals (Inciardi and Pottieger 1998; Chaiken and Chaiken

1990; Hunt 1990). Nevertheless, among criminals, those who are frequent drug users are likely to be frequent offenders and use many kinds of drugs regardless of sex, race/ethnicity, age, and place of residence (Chaiken and Chaiken 1990).

Anglin and Perrochet (1998) have argued that the association between drugs and property crime is not universal. That is, in countries such as Britain and the Netherlands, where drug maintenance and treatment are provided by the government, there are much lower levels of property crime attributed to narcotics use. Further, as Waldorf (1998) noted, social class will affect the drug-crime relationship. Not only will income affect whether crimes are committed, but drug users who are poor will have higher arrest and conviction rates. The nature of economically motivated crime also varies by type of drug use. In one study of cocaine-heroin users, robbery was associated with cocaine use, but not with marijuana, pill, or alcohol use before, during, or after crime commission (Lipton and Johnson 1998).

The fact that treatment reduces income-generating crimes rather than all crimes supports the economic motivation model (Anglin and Perrochet 1998). In contrast, self-report data do not provide equivocal support for an economic motivation theory. In 1997, only 16 percent of jail inmates reported having committed a crime to get money for drugs, and more property (26 percent) crimes than violent (9 percent) crimes were committed to get money for drugs (Harlow 1998). Data from adult inmates have shown that only about one-fourth cite drug involvement as their main reason for first becoming involved in crime (Chaiken and Chaiken 1990). Also, in a study of homicides in New York City, only 4 percent of all drug-related homicides were classified as economically motivated (Goldstein et al. 1989), and cocaine was the drug most often associated with economically motivated homicides (see Lipton and Johnson 1998). Goldstein (1989) found a stronger association between heroin use and economically motivated crimes for Hispanics than for blacks or whites.

Studies of female addicts suggest that they tend to commit primarily nonviolent income-generating crimes, especially prostitution, drug selling, and shoplifting (Chaiken and Chaiken 1990; Datesman 1981), although female drug users engage in a variety of crimes (Erickson and Watson 1990; Sommers and Baskin 1993). Not only do women engage in prostitution to get money for drugs, they often barter sex for drugs (Goldstein, Ouellet, and Fendrich 1992). Much of the research on prostitution, similar to research conducted on other criminal behavior among male and female drug abusers, suggests that many prostitutes committed crimes prior to becoming addicted to drugs and that prostitution served as a means of making a living, not just a means of obtaining drugs. Even if these women had not previously engaged in prostitution, they had engaged in some types of criminal behavior prior to addiction (Erickson and Watson 1990;

Graham and Wish 1994). In other words, drug use does not cause prostitution; rather, individuals who are prone to drug use are also prone to criminal behavior of all kinds (Inciardi 1986).

The role of prostitution among female addicts has changed in response to variations in drug epidemics (Inciardi and Pottieger 1998). Although studies in the 1970s found that more female drug users were prostitutes than were drug dealers (see Erickson and Watson 1990), as crack selling became profitable, some women gave up prostitution in favor of dealing (Fagan 1994). Still, many women who use crack continue to be heavily involved in prostitution (Fagan 1994), and the economic motive is clear (Erickson and Watson 1990). In other words, the crack epidemic provided female prostitutes with a high-income-generating alternative to prostitution, but it also immersed female users deeper in prostitution. Goldstein and colleagues (1992) described how crack cocaine affected the drug-prostitution association by lowering the price of sex for street prostitutes, lowering the social status of cocaine, and increasing the level of social disorganization and street violence related to prostitution. Their research, however, challenges the notion that most female addicts are forced to become prostitutes. (For greater detail on the association between drug use and prostitution, see Goldstein et al. 1992; Hunt 1990; Erickson and Watson 1990.)

The economic motivation explanation has not been supported among adolescents. Intensive drug users and highly delinquent youths do not report committing crimes to raise money for drugs (Johnson et al. 1986). Adolescents in the community report committing crimes to have fun, to obtain valued goods, or to get money. They claim to be able to obtain drugs within their usual budgets and maintain that other commodities are purchased using the profits of crime (Carpenter et al. 1988; see also Altschuler and Brounstein 1991). The current involvement of many youths in the crack market may provide enough income to reduce their need for economically motivated crime.

In fact, across age groups, there appears to be much less economically motivated, predatory crime related to crack than there was to heroin in the 1970s and 1980s. The reduction in property crime since the beginning of the crack epidemic supports this view. Because there is more money in crack distribution than in previous illegal drug markets, drug dealing may have obviated the need to commit property crimes and income-generating violent crimes (Miczek et al. 1994). Thus, much of the recent research dispels the assumption of economically motivated crime, excluding drug dealing.

The major illegal activity for heroin-cocaine users is drug distribution, and this is true even for less drug-involved criminals (Lipton and Johnson 1998). The selling of crack surfaced in 1984, and by 1988, it became the most frequently

committed crime, regardless of prior drug use or criminal involvement. Further, crack became the most economically valuable drug for dealers. According to Harrison (1992a), the number of drug-dealing opportunities reduces the necessity of property crime because it provides drugs and/or alternative income. Recent research suggests that, although the crack era is in decline, crack sales have stabilized. Users are moderating their use, but crack cocaine is still a permanent part of the drug economy and community (Lipton and Johnson 1998).

We have chosen to exclude dealing as a drug-related crime and will only briefly discuss the intricacies of drug use and drug dealing (for greater detail, see Hunt 1990; Fagan and Chin 1990; Inciardi and Pottieger 1991; Johnson, Golub, and Fagan 1995; Johnson et al. 1994). It should be noted that rates of drug use vary considerably among dealers. That is, many dealers, especially at the higher levels, do not use drugs or do so moderately (Hunt 1990). In fact, for many young crack dealers, selling is an economic opportunity rather than a means of financing their own drug use (Harrison and Freeman 1998). Yet, at lower levels, most dealers use drugs. Further, many, if not most, serious drug users at some time are involved in dealing activities. Many high-frequency dealers also engage in other criminal activities. Females are often dealers (Hunt 1990; Fagan 1994), although in relation to males, fewer women participate in drug distribution (Dunlap, Johnson, and Maher 1997). Further, women's roles are mostly confined to the lower levels of the business (Dunlap et al. 1997; Erickson and Watson 1990; Johnson et al. 1995).

Studies consistently show that crack users are heavily involved in dealing, but they are also involved in nondrug criminality (Johnson et al. 1994; Inciardi and Pottieger 1994). In a study of in-custody, inner-city male adolescents, researchers found that large percentages of dealers did not use cocaine or crack, but few crack or cocaine users did not also deal (Lipton and Johnson 1998; see also Inciardi and Pottieger 1998). Johnson and colleagues (1994) compared crack abusers with other drug users and found that, in general, crack abusers used drugs at a much higher rate, were more involved in drug dealing, and had higher frequencies of nondrug crimes (except compared with heroin users). Crack selling, however, was also prevalent among cocaine snorters and marijuana users. In fact, for all illicit drug users, crack selling was the most frequent crime and generated the largest cash income. Violence was related to crack selling rather than use, and those selling in groups had higher rates of violence than those selling alone. Johnson and colleagues' (1994) findings support other research that indicates the association of crack use with violence is due to distribution rather than use. This type of violence has been labeled "systemic" and is discussed in greater detail in the next section.

The systemic model

The systemic model explains drug-related crime as resulting from negative interactions in the illegal drug market. This model probably accounts for most of the current violence related to illicit drug use, especially drug-related homicides, which increased significantly with the appearance of crack in 1985 (although they are currently declining) (Blumstein 1995b; Fagan and Chin 1990; Goldstein et al. 1989). In a 1988 study in New York City, three-quarters of drug-related (including alcohol-related) homicides were systemic. The major drug of involvement was crack, followed by powder cocaine (Goldstein et al. 1989). Only 3 of 218 homicides involved heroin. In a 1984 study of New York State (excluding New York City), the majority of drug-related homicides were found to be psychopharmacological (Goldstein 1997). Goldstein (1997) suggested that the difference in findings from the 1984 study to the 1988 study probably reflects the more rural nature and the poorer documentation in police records in the former study as well as the fact that the latter study occurred during the peak year of crack use and distribution.

Whereas most research finds that only a small proportion of females are perpetrators of systemic violence, recent studies suggest that women's roles in the illicit drug market are increasing (Erickson and Watson 1990; Johnson et al. 1995). Hence, we expect to see higher rates of drug-related systemic violence among females (see Fagan 1994; Goldstein 1989; Mieczkowski 1994). Further, women are often victims of cocaine-related violence (Goldstein 1998). Drug sellers are often victims of assaults, robberies, and homicides. In addition, police, potential witnesses, and informants are often victims of systemic violence (U.S. DOJ, BJS 1992a). With the increase of systemic violence, some studies that use law enforcement data have reported that Hispanics and blacks are more likely than whites to be perpetrators and victims of systemic violence, although findings on ethnic/racial differences are inconsistent across studies (De La Rosa and Caris 1993).

Goldstein (1997) suggested that at any given time, systemic violence is associated with whatever drug is most popular. He described the cyclical nature of the association. When the drug first increases in popularity, there is little violence, probably because there is great demand that dealers cannot meet (thereby reducing competition for customers). This stage lasts about 6 months. As the number of new users levels off, violence begins to rise. Dealers now have enough supply to meet demand, and they need to compete for territory. At this point, dealers also increase their awareness of subordinates who may be stealing money or drugs from them, leading to more violence. Finally, individuals who are heavily involved with the new drug begin to perpetrate con games to support their continued use, and these can also result in violence. Homicides increase at this point

because many dealers carry firearms and use these weapons to kill rivals or subordinates who have broken rules. Violence eventually declines as drug distribution becomes stabilized and as community norms begin to reject the behavioral excesses associated with drug use and dealing. Goldstein also pointed out that many of the individuals involved in the drug scene are violent, and some of their violent behavior serves the purpose of saving face. Thus, even if the drug scene disappeared, these same individuals would still engage in violence.

According to Goldstein (1998), he and his colleagues' research supports the prominence of the systemic model and dispels many myths about the drug-crime relationship. That is, their research indicates that very little violence is caused by individuals who are high on illicit drugs (i.e., pharmacological violence) and that little drug-related violence is economically motivated. Thus, he has claimed that public safety is not threatened by drug users who commit predatory acts to get money for drugs or who are under the influence of drugs. Yet, some robberies and the resulting assaults or homicides that have been categorized as systemic violence probably involve an economic motivation. Indeed, Parker and Auerhahn (1999) criticized Goldstein's typology for being biased toward the systemic model.

Studies conducted in the 1980s suggested that the systemic model was not applicable to the majority of youthful drug users because few were involved in distribution at a high enough level (see White 1990). More recent studies suggest that the systemic model can probably account for a significant amount of drug-related violence among youths in inner cities (Fagan and Chin 1990; Inciardi and Pottieger 1991). The crack market has attracted a younger group of sellers than previous drug markets, possibly because the demand for crack makes dealing easy and profitable, the business provides opportunities for advancement and feelings of achievement, and dealing creates a challenge for youths (Inciardi and Pottieger 1991).

Some researchers have blamed the increased violence related to drug dealing on youth gangs. In general, however, studies show that there are numerous types of gangs, many of which do not sell or use drugs (Levine and Rosich 1996). Further, dealing is equally prevalent among gang members as among nongang members (De La Rosa and Caris 1993; J. Moore 1990; Inciardi 1990b; Waldorf 1998). In addition, there are no data to suggest that drug-related activities per se increase gang violence (Levine and Rosich 1996; J. Moore 1990; Fagan 1989). According to Joan Moore (1990), increases and decreases in gang violence have little to do with drugs. (For greater detail on gangs, violence, drug use, and drug dealing, see *Free Inquiry in Creative Sociology* 1996, 1997; Klein, Maxson, and Miller 1995; J. Moore 1990.)

Van Kammen and Loeber (1994) demonstrated that previous involvement in violent crime increased the risk of drug dealing for male adolescents, as did previous involvement in property crime. Thus, individuals drawn to dealing are already violent and delinquent and, once involved in drug use or dealing, their level of violent behavior (including weapons possession) increases (see also Fagan and Chin 1990). Johnson and colleagues (1994) also found that crack use did not increase initiation rates for violent crimes such as assault, robbery, or rape. Similarly, Inciardi and Pottieger (1991) found that crack dealers, when compared with those with little or no involvement in crack sales, were younger when they began their criminal careers and had been involved in criminal activity (including sale of marijuana) prior to becoming crack dealers. However, involvement in dealing accelerated delinquency involvement. Johnson and colleagues (1990) argued that violence in the crack trade is a result of violent individuals selecting themselves for this line of work as well as being recruited into it (to provide protection, maintain discipline, and fight for turf).

Overall, the results of these studies suggest that deviant individuals are attracted to drug selling, rather than that drug selling causes individuals to become criminals. Hence, these results support a common cause rather than a direct causal model. We discuss the common cause model in greater detail in the next section.

The common cause model

Jessor and Jessor (1977) identified a problem behavior syndrome in which cigarette use, precocious sexual behavior, problem drinking, use of marijuana and other drugs, stealing, and aggression were clustered together. They found that this cluster of behaviors was explained by the same set of environmental and personality variables and was negatively related to conventional behavior. Other researchers, however, have argued that problem behaviors constitute several distinct factors rather than a single construct (for a review, see White and Labouvie 1994). Overall, the literature suggests that substance use and delinquency share several common causes or predictors, although there are also specific factors (e.g., coping style and opportunity) that determine which adolescents specialize in each behavior.

Given that problem behaviors share several common causes, the same individuals would be expected to engage in both substance use and crime. For example, many of the childhood risk factors for violence identified in the National Research Council report on violence (Reiss and Roth 1993) have also been identified as risk factors for teenage drug use and for adult alcohol and drug problems (see Hawkins, Catalano, and Miller 1992). Some of the common risk

factors are hyperactivity, impulsiveness, risk taking, inability to delay gratification, abuse or rejection in the family, lack of parental nurture, early school failure, peer rejection, social disorganization, and availability of drugs and/or weapons. However, in a study of a high-risk sample, McCord and Ensminger (1997) found that there were different predictors of alcoholism and violence. For example, early aggression and poor school attendance in the first grade predicted violence, but not alcoholism, in adulthood. Further, risk factors for alcoholism and violence differed by gender. Brook, Whiteman, and Cohen (1995) demonstrated that there are both specific and common antecedents for drug use, theft, and aggression. They examined a number of predictors from several different domains and found that drug use and theft share more similar antecedents than does aggression. Clinical and community data clearly support a comorbidity between alcohol/drug abuse and antisocial personality disorder (ASPD) (Regier et al. 1990; Collins, Schlenger, and Jordan 1988; Hesselbrock, Hesselbrock, and Stabenau 1985). The data on comorbidity suggest that individuals with ASPD are likely to be heavily involved with alcohol and drugs and that those with drug and alcohol disorders are often diagnosed with ASPD. Yet there is no evidence to show that one disorder causes the other. Rather, there may be a set of predisposing personality or temperament factors (e.g., impulsiveness) or family background factors (e.g., parental alcoholism) that may contribute to both. Some of these factors may even have a genetic basis, although more research is needed to provide conclusive evidence (Virkkunen and Linnoila 1993; Miczek et al. 1994).

Criminal justice statistics indicate that offenders are heavier drinkers and drug users than the rest of the population. Data indicate that about one-third of inmates in local jails and State prisons are daily drinkers (Greenfeld 1998). Two-thirds of the jail inmate sample drinkers and one-third to one-half of the prison sample drinkers reported having been in a treatment program for alcohol dependence. In addition, most jail inmates reported having used illicit drugs (82 percent), and two-thirds were regular users (i.e., used at least once a week for a month). The predominant drug was marijuana, although more than half reported having used cocaine or crack at any time, and 31 percent reported regular use of cocaine. Further, 42 percent of jail inmates had received substance abuse treatment (Harlow 1998). In one study of prison inmates, 56 percent were diagnosed with alcohol abuse or dependence at some time in their lives, compared with approximately 19 to 29 percent of those living in the community (Collins 1993). Kouri and colleagues (1997) used structured clinical interviews to diagnose alcohol and drug dependence among male State prison inmates in Massachusetts. They found that 95 percent of those interviewed met DSM-III-R (Diagnostic and Statistical Manual of Mental Disorders) diagnosis of abuse or dependence for at least one substance.

Similarly, recent data from the DUF/ADAM study indicate that between 51 percent (in San Jose) and 80 percent (in Chicago) of male arrestees and between 38 percent (in San Antonio) and 81 percent (in Manhattan) of female arrestees tested positive for any drug (U.S. DOJ, BJS 1998). Almost half of the males and 65 percent of the females arrested for homicide tested positive for drugs. Analyses of the DUF/ADAM data have found that more women test positive for drugs than men (Graham and Wish 1994). This gender difference could result from the fact that only the most deviant women get arrested. Data from studies of urine testing of adolescent offenders also indicate high rates of drug use (Dembo et al. 1990). These drug-testing results do not necessarily shed light on a causal relationship because these rates reflect drug use at the time of the arrest, not necessarily the time of offense. Thus, these data simply demonstrate that many criminal offenders are also drug users.

Summary of empirical research

It is obvious from the previous review of empirical research that a single model cannot account for the drug-crime relationship among all people. Rather, there are some individuals for whom the acute, and possibly chronic, cognitive effects of some drugs, such as alcohol, increase the propensity toward criminal behaviors. For others, involvement in deviant behavior weakens bonds to conventional norms and increases involvement in deviant subcultures (including the illicit drug market) that provide opportunities and reinforcement for increased deviant behavior, including drug use. Finally, for others, probably a majority, biopsychological factors (e.g., temperament) and early parent-child interactions, in combination with socioenvironmental factors, increase the risk for involvement in all types of deviant behavior.

In short, the drug-using/crime-committing population is not homogeneous; rather, it is composed of subgroups of individuals displaying different causal paths. This should come as no surprise because research has long shown that both drug users and criminals are not homogeneous groups with single developmental trajectories (Laub and Sampson 1993; Moffitt 1993; Zucker 1994). Of prime importance in this regard is distinguishing between individuals for whom the problem (whether drug use, delinquency/crime, or a combination of both) is limited to adolescence and those individuals for whom it persists into adulthood. The former type of behavior has been shown to be predicted by normal socialization processes, whereas the latter typically has an earlier onset, is more extreme in its manifestations, and is predicted by personality and behavioral variables (Labouvie and White 1998; Moffitt 1993). This developmental heterogeneity of both drug use and delinquency necessitates approaches to intervention that are developmentally appropriate, not monothematic or focused on a narrow range of risk factors (Gorman in press).

Conclusions

Several general findings have emerged from this review:

- Drug users, and even drug addicts, are heterogeneous in terms of their levels of criminality and their patterns of crime.
- Criminal offenders are heterogeneous in terms of their levels of drug use and patterns of use.
- Most drug users do not commit any crimes, with the exception of obvious drug-related crimes (i.e., possession and dealing).
- Most criminally involved male and female drug users do not specialize in only one type of crime.
- Although there are common causal factors in both alcohol/drug use and delinquent and criminal behavior, there exist various subgroups displaying different causal paths.
- For most criminally involved drug users, drug use does not cause initial criminal involvement.
- Alcohol is the drug most often associated with psychopharmacologically motivated violent crime.
- A large proportion of drug-related crime, especially violent crime, is a result of drug market forces.
- It is not the type of drug per se, but rather the economic conditions of the drug market that appear to influence the drug-crime connection.

What is especially obvious from this review is the fact that there is substantial variation in all of the issues surrounding drug use and crime. Thus, stereotypes of drug use and crime are often inaccurate.

Broad policy options

Although violent crime rates have dropped significantly during the 1990s, current concern about the drug-crime nexus is focused primarily on drug use and violence. There are many different types of individuals involved in drug-related violence. Hence, prevention and intervention policies should differ, depending on which type of violent offender we are trying to reach. Some individuals are violent regardless of whether they drink or use drugs. Targeted interventions to reduce aggressive tendencies would be most promising for them. Yet, for some

individuals, the state of intoxication (especially from alcohol), the setting, and specific provocation interact on a specific occasion to cause an isolated incident of violent behavior. Responsible drinking campaigns aimed at reducing high-quantity consumption would be most appropriate for this group, as well as situational controls (such as responsible beverage service training) and community-based actions designed to limit access.

Reduction of most of the violence related to illicit drug use would have to focus on the illegal drug trade.

Reduction of most of the violence related to illicit drug use would have to focus on the illegal drug trade. Drug control efforts for much of this century, and especially since the late 1980s, have attempted to address this issue through interdiction designed to disrupt the importation of drugs into the country and law enforcement strategies designed to arrest, prosecute, and imprison those involved in the domestic market. This has resulted in record numbers of offenders being arrested and incarcerated for drug-related offenses. Critics argue that this approach has failed to curtail drug use or violent crime and that changes in U.S. drug policy are required (Nadelmann 1998). For some, a shift of resources from supply reduction to demand reduction, through prevention and treatment of drug abuse, would be effective in reducing both drug use and systemic violence (Falco 1992). A far more radical alternative strategy, and one that is extremely controversial in the United States, is legalization of drugs (Buckley 1996; Trebach 1993). This, it is argued, would remove the profit from drug dealing, and, without profits, dealers would leave the business and no longer push drugs on young people. In addition, disputes related to illegal distribution would be eliminated.

As discussed at the beginning of this chapter, a variety of harm-reduction models occupy the vast area between the war on drugs and outright drug legalization (MacCoun et al. 1996; Weingardt and Marlatt 1998). Australia and a few European countries employ harm-reduction strategies, and some researchers have noted the lower rates of drug-related crime in such places (Nadelmann 1998). Harrison and Backenheimer (1998) suggest that if drug abusers had easier access to drugs (e.g., in the form of maintenance drugs) and to finances (e.g., in the form of welfare), then there would be little criminal involvement on their part. They also argue that the high rates of illicit drug use and violent crime in the United States are a direct result of the social policies in our country. However, one needs to exercise caution in drawing inferences from the policies that exist in other countries, as American society might differ in other ways that have more important effects on drug consumption and related consequences than policy (MacCoun and Reuter 1997). In addition, it is worth

noting that the country with the best-known harm-reduction-based policies, The Netherlands, has experienced a shift toward more punitive sanctions in recent years, primarily as a result of public fear of crime (Baerveldt et al. 1998).

Others argue that even if we were to eliminate or substantially curtail the drug economy, we would not necessarily reduce violence because much of the drug-related violence results from the recruitment of violent individuals from violent communities (Osgood 1994). It is also possible that if the drug market were reduced or eliminated, some criminals who profit financially from the drug trade would revert to alternative crimes to get money, including violent crimes such as robbery (U.S. DOJ, BJS 1992a). In this case, prevention and treatment efforts may be better spent concentrating on violent individuals and the sources of their violence. These changes would entail providing youths with noncriminal routes to social status, including better paying jobs, better schools, and more opportunities, as well as remedying community disorganization and economic hardships. For example, Inciardi and Pottieger (1998) argue that drug use per se is not the root cause of criminality for most street drug users. Rather, the real cause of the problem is urban poverty and the complex problems surrounding it, such as lack of job skills, educational failure, and inadequate parental socialization.

Still others maintain that both drug use and crime are part of a broader decline in morality and civility in the United States (Bennett, DiIulio, and Walters 1996). Proponents of this perspective argue that retreating from current drug control policies would simply signal a further lowering of moral standards and hasten the descent into social disorder (Wilson 1991, ch. 12).

Although there are no easy solutions to the problems that face us as we enter the 21st century, especially those concerning drug use among youths and the increasingly punitive nature of our response to it, a more open debate of the issues and policy options available would surely benefit society. Fortunately, there are some initial signs that such a debate may, at last, be feasible (Wren 1997).

Implications for the 21st century

In recent years, we have witnessed a large decrease in homicidal violence, although the reasons for the decline are not known. Some experts believe the decline was due to an increased number of police officers on the streets, and others believe it was due to changing demographics, increased violence prevention programs, or improvements in the economy (Goldstein 1998). Goldstein (1998) argues, however, that this decrease was due to the stabilization of drug markets.

The peak in homicide rates in 1979–81 was followed by a two-decade low in 1985. This decline was due to the fact that the powder cocaine market stabilized. Similarly, the sharp increase in homicides in the late 1980s was due to instability in the crack market and the subsequent decline that occurred after the market stabilized in the 1990s. There is, of course, no way to be sure of the exact cause or causes for the recent decline in violent crime. However, if we assume that drug use or drug dealing contributed to the sharp increase in violence of the mid- to late 1980s, then it would be logical to assume that changes in drug use or the drug economy may have contributed to its more recent decline.

As new illegal drugs come on the market or old ones regain popularity, and if there is chaos in distribution of these drugs, we may again see increases in drug-related violence. For example, there have been recent increases in heroin use and in organization of heroin dealing (Executive Office of the President, ONDCP 1998d). If heroin dealing becomes as profitable as cocaine/crack dealing, then we may see an increase in systemic violence. Alternatively, if users and addicts cannot make enough money dealing, then it is possible that property crime may increase. Over the past several years, the largest increase in illicit drug use among youths has occurred for marijuana. Although marijuana is not as addictive as cocaine/crack or heroin, little is known about the market for marijuana. With the resurgence of marijuana popularity and the increase in quality and price (Executive Office of the President, ONDCP 1998d), we may begin to see more systemic violence related to sale of the drug. If the market becomes more organized, then we also risk more dealers selling a variety of drugs. Further, with increases in prices for high-quality marijuana, perhaps we will see more economically motivated crimes.

The fact that the newest generation of drug users has largely avoided the use of hard drugs (such as cocaine and heroin) has optimistic implications for their future. That is, this generation should experience fewer negative health outcomes and less involvement in criminal activities (Golub and Johnson 1999). Nevertheless, because of poor socialization, economic hardship, and the lack of skills and opportunities, many of these individuals may still be forced into crime as a means of economic survival.

If heroin dealing becomes as profitable as cocaine/crack dealing, then we may see an increase in systemic violence. Alternatively, if users and addicts cannot make enough money dealing, then it is possible that property crime may increase.

In contrast to illicit drug market changes, Parker and Auerhahn (1998) argue that the decreases in homicide rates and other forms of violence in large cities during the mid-1990s were preceded by significant declines in alcohol consumption in the United States. They worry that as alcohol use regains popularity, we will again see increases in violence. In addition, if the recent increase in methamphetamine use continues, we may see more psychopharmacologically induced violence. There also has been a noted increase in use of some fad drugs in different areas of the country, including Ketamine (an animal tranquilizer), Rohypnol (a date rape drug), GHB (gamma hydroxy butyrate, a date rape drug), and MDMA (methylene dioxymethamphetamine, a hallucinogen) (Executive Office of the President, ONDCP 1998d). Use of drugs such as Rohypnol and Ketamine, which are sedatives that act similarly to alcohol, may also lead to increases in violence. Our analyses of DUF/ADAM data, as well as research by others (e.g., Hamid 1991), indicate that factors pertaining to drug markets and their relation to the commission of different types of crime will vary by geographic location, presumably because the conditions that affect these outcomes differ from place to place. Thus, interventions designed to positively affect such factors must be adapted to address specific local circumstances and engage community agencies and members in defining problems and finding solutions.

As we reviewed this multifaceted literature, one thing became clear. There are definitely drug epidemics that are cohort specific, and they come and go quickly. As researchers begin to study these epidemics, and especially by the time that empirical findings are published, the epidemics often dissipate. Hence, the conclusions we reach and their policy implications become outdated too soon. In other words, it may be impossible to stay on top of the drug-crime relationship because of its constantly changing nature.

The writing of this chapter was supported in part by a grant from the National Institute on Drug Abuse (DA/AA-03395). The authors are grateful to Ping Hsin Chen for her help with the figures and references and Heather Stephens for her help with the literature review and references.

Note

1. A number of areas cannot be covered in this review given space limitations. Some are noted in the body of the text and references are given that the interested reader can pursue. Other areas omitted include supply-reduction strategies such as interdiction and law enforcement (see Kleiman and Smith 1990; M. Moore 1990). We also do not discuss the intricate relationship among drug use, crime, and HIV infection (see Hunt 1990; Inciardi and Pottieger 1998; Inciardi 1990a). In addition, most of the crimes included in this chapter were predatory in nature (see Chaiken and Chaiken 1990). We could not cover domestic violence, spousal abuse, and child abuse (see Lee and Weinstein 1997; Leonard 1993; Widom 1993; Miller, Maguin, and Downs 1997; Kantor and Asdigian 1997). Another

major area omitted was gun availability and control (see Cook and Moore 1995; McBride and Swartz 1990). We also excluded treatment and prevention, which are dealt with in other volumes in this series.

References

- Alaniz, Maria A., Randi S. Cartmill, and Robert N. Parker. 1998. Immigrants and violence: The importance of neighborhood context. *Hispanic Journal of Behavioral Science* 20 (May): 155–174.
- Altschuler, David M., and Paul J. Brounstein. 1991. Patterns of drug use, drug trafficking, and other delinquency among inner-city adolescent males in Washington, D.C. *Criminology* 29 (November): 589–622.
- Anglin, M. Douglas, and Brian Perrochet. 1998. Drug use and crime: A historical review of research conducted by the UCLA Drug Abuse Research Center. *Substance Use & Misuse* 33 (July): 1871–1914.
- Baerveldt, Chris, Hans Bunkers, Micha De Winter, and Jan Kooistra. 1998. Assessing a moral panic relating to crime and drugs policy in the Netherlands: Towards a testable theory. *Crime, Law, and Social Change* 29:31–47.
- Bennett, William J., John J. DiIulio, Jr., and John P. Walters. 1996. *Body count: Moral poverty . . . and how to win America's war against crime and drugs*. New York: Simon & Schuster.
- Blumstein, Alfred. 1995a. Prisons. In *Crime*, edited by James Q. Wilson and Joan Petersilia. San Francisco: Institute for Contemporary Studies.
- . 1995b. Youth violence, guns and the illicit-drug industry. In *Trends, risks, and interventions in lethal violence: Proceedings of the third annual spring symposium of the Homicide Research Working Group*, edited by Carolyn Block and Richard Block. Research Report, NCJ 154254. Washington, D.C.: U.S. Department of Justice, National Institute of Justice.
- Blumstein, Alfred, David P. Farrington, and S. Moitra. 1985. Delinquency careers: Innocents, desisters, and persisters. In *Crime and justice: An annual review of research*, edited by M.H. Tonry and N. Morris. Vol. 7. Chicago: University of Chicago Press.
- Brook, Judith S., Martin Whiteman, and Patricia Cohen. 1995. Stage of drug use, aggression, and theft/vandalism: Shared and unshared risks. In *Drugs, crime, and other deviant adaptations: Longitudinal studies*, edited by Howard B. Kaplan. New York: Plenum Press.
- Buchanan, David R., and Lawrence Wallack. 1998. This is the Partnership for a Drug Free America: Any questions? *Journal of Drug Issues* 28:329–356.

Buckley, William F. 1996. The war on drugs is lost. *National Review*, 12 February, 35–38.

Bursik, Robert J., Jr. 1988. Social disorganization and theories of crime and delinquency: Problems and prospects. *Criminology* 26 (November): 519–551.

Bushman, Brad J. 1997. Effects of alcohol on human aggression: Validity of proposed explanations. In *Recent developments in alcoholism, volume 13: Alcohol and violence*, edited by Marc Galanter. New York: Plenum Press.

Byqvist, Siv, and Borje Olsson. 1998. Male drug abuse, criminality and subcultural affiliation in a career perspective. *Journal of Psychoactive Drugs* 30:53–68.

Carpenter, C., Barry Glassner, Bruce D. Johnson, and J. Loughlin. 1988. *Kids, drugs, and crime*. Lexington, Massachusetts: Lexington Books.

Caulkins, Jonathan P., and Peter Reuter. 1997. Setting goals for drug policy: Harm reduction or use reduction. *Addiction* 92 (September): 1143–1150.

Center for Substance Abuse Research (CESAR). 1998a. Employee drug tests indicate increase in marijuana use, decrease in cocaine. CESAR FAX 7 (48) (November).

———. 1998b. National drug-related emergency department visits may have peaked. CESAR FAX 7 (4) (January).

———. 1997. Marijuana most frequently detected drug among tested U.S. workforce. CESAR FAX 6 (40).

Chaiken, Jan M., and Marcia R. Chaiken. 1990. Drugs and predatory crime. In *Drugs and crime*, edited by Michael Tonry and James Q. Wilson. Vol. 13 of *Crime and justice: A review of research*. Chicago: University of Chicago Press.

Chaiken, Marcia R. 1993. Can drug epidemics be anticipated? *National Institute of Justice Journal* 226 (April): 23–30.

Chermack, Stephen T., and Peter R. Giancola. 1997. The relation between alcohol and aggression: An integrated biopsychosocial conceptualization. *Clinical Psychology Review* 17:621–649.

Cline, Sibyl. 1974. The Federal drug abuse budget for fiscal year 1975. In *Governmental response to drugs: Fiscal and organizational*, edited by the Drug Abuse Council. Washington, D.C.: Drug Abuse Council.

Cohen, Mark A., Mark W. Lipsey, David B. Wilson, and James H. Derzon. 1994. *The role of alcohol consumption in violent behavior: Preliminary findings*. Nashville: Vanderbilt University.

Collins, James J. 1993. Drinking and violence: An individual offender focus. In *Alcohol and interpersonal violence: Fostering multidisciplinary perspectives*, edited by Susan E. Martin. Rockville, Maryland: U.S. Department of Health and Human Services, National Institutes of Health.

———. 1986. The Relationship of problem drinking to individual offending sequences. In *Criminal careers and "career criminals,"* edited by A. Blumstein, J. Cohen, J. Roth, and C.A. Visher. Washington, D.C.: National Academy Press.

———, ed. 1981. *Drinking and crime*. New York: Guilford Publications.

Collins, James J., Jr., R.L. Hubbard, and J.V. Rachal. 1985. Expensive drugs use and illegal income: A test of explanatory hypotheses. *Criminology* 23:743–764.

Collins, James J., and Pamela M. Messerschmidt. 1993. Epidemiology of alcohol-related violence. *Alcohol Health and Research World* 17:93–100.

Collins, James J., and William E. Schlenger. 1988. Acute and chronic effects of alcohol use on violence. *Journal of Studies on Alcohol* 49:516–521.

Collins, James J., William E. Schlenger, and B.K. Jordan. 1988. Antisocial personality and substance abuse disorders. *Bulletin of the American Academy on Psychiatry Law* 16:187–198.

Cook, Phillip J., and Mark H. Moore. 1995. Gun control. In *Crime*, edited by James Q. Wilson and Joan Petersilia. San Francisco: ICS Press.

Cook, Phillip J., and Michael J. Moore. 1993. Economic perspectives on reducing alcohol related violence. In *Alcohol and interpersonal violence: Fostering multidisciplinary perspectives*, edited by Susan E. Martin. Rockville, Maryland: U.S. Department of Health and Human Services, National Institutes of Health.

Datesman, Susan K. 1981. Women, crime, and drugs. In *The drugs-crime connection*, edited by James A. Inciardi. Beverly Hills: Sage Publications.

De La Rosa, Mario R., and Luis H. Caris. 1993. The drug use and crime connection among Hispanics: An overview of research findings. In *Hispanic substance abuse*, edited by Raymond Sanchez Mayers, Barbara L. Kail, and Thomas D. Watts. Springfield, Illinois: Charles C. Thomas.

Dembo, Richard, Linda Williams, Alan Getreu, Lisa Genung, James Schmeidler, Estrellita Berry, Eric D. Wish, and Lawrence La Voie. 1991. A longitudinal study of the relationships among marijuana/hashish use, cocaine use, and delinquency in a cohort of high risk youths. *Journal of Drug Issues* 21:271–312.

- Dembo, Richard, Linda Williams, Eric D. Wish, Estrellita Berry, Alan Getreu, Mark Washburn, and James Schmeidler. 1990. Examination of the relationships among drug use, emotional/psychological problems, and crime among youths entering a juvenile detention center. *International Journal of the Addictions* 25:1301–1340.
- Denison, M. Elena, Alfonso Paredes, and Jenia Bober Booth. 1997. Alcohol and cocaine interactions and aggressive behaviors. In *Recent developments in alcoholism, volume 13: Alcohol and violence*, edited by Marc Galanter. New York: Plenum Press.
- Derzon, James H., and Mark W. Lipsey. 1999. A synthesis of the relationship of marijuana use with delinquent and problem behaviors. In *School Psychology International* 20:57–68.
- Dunlap, Eloise, Bruce D. Johnson, and Lisa Maher. 1997. Female crack sellers in New York City: Who they are and what they do. *Women & Criminal Justice* 8:25–55.
- DuPont, Robert L. 1978. The drug abuse decade. *Journal of Drug Issues* 8 (Spring): 173–187.
- Elliott, Delbert S., David Huizinga, and Scott Menard. 1989. *Multiple problem youth: Delinquency, substance use, and mental health problems*. New York: Springer-Verlag.
- Ensminger, Margaret E., James C. Anthony, and Joan McCord. 1997. The inner city and drug use: Initial findings from an epidemiological study. *Drug and Alcohol Dependence* 48 (December): 175–184.
- Erickson, Patricia G., and Valerie A. Watson. 1990. Women, illicit drugs, and crime. In *Research advances in alcohol and drug problems*, edited by Lynn T. Kozlowski, Helen M. Annis, Howard D. Cappell, Frederick B. Glaser, Michael S. Goodstadt, Yedi Israel, Harold Kalant, Edward M. Sellers, and Evelyn R. Vingilis. Vol. 10. New York: Plenum Press.
- Executive Office of the President, Office of National Drug Control Policy. 1998a. *The National Drug Control Strategy, 1998: Budget summary*. Washington, D.C.
- . 1998b. *The National Drug Control Strategy, 1998: A ten-year plan*. Washington, D.C.
- . 1998c. *Performance measures of effectiveness: A system for assessing the performance of the National Drug Control Strategy*. Washington, D.C.
- . 1998d. *Pulse Check: National trends in drug abuse*. Washington, D.C.
- . 1994. *The National Drug Control Strategy, 1994: Budget summary*. Washington, D.C.
- Fagan, Jeffrey. 1994. Women and drugs revisited: Female participation in the cocaine economy. *Journal of Drug Issues* 24:179–225.

- . 1993a. Interactions among drugs, alcohol, and violence. *Health Affairs* 12 (Winter): 65–79.
- . 1993b. Set and setting revisited: Influence of alcohol and illicit drugs on the social context of violent events. In *Alcohol and interpersonal violence: Fostering multidisciplinary perspectives*, edited by Susan E. Martin. Rockville, Maryland: U.S. Department of Health and Human Services, National Institutes of Health.
- . 1990. Intoxication and aggression. In *Drugs and crime*, edited by Michael Tonry and James Q. Wilson. Vol. 13 of *Crime and justice: A review of research*. Chicago: University of Chicago Press.
- . 1989. The social organization of drug use and drug dealing among urban gangs. *Criminology* 27 (November): 633–669.
- Fagan, Jeffrey, and Ko-lin Chin. 1990. Violence as regulation and social control in the distribution of crack. In *Drugs and violence: Causes, correlates and consequences*, edited by M. De La Rosa, E.Y. Lambert, and B. Gropper. Research Monograph 103. Rockville, Maryland: U.S. Department of Health and Human Services, National Institute on Drug Abuse.
- Fagan, Jeffrey, and E. Pablon. 1989. *Contributions of delinquency and substance use to school dropout among inner city youth*. New York: John Jay College of Criminal Justice.
- Fagan Jeffrey, Joseph G. Weis, and Yu-The Cheng. 1988. *Delinquency and substance use among inner city students*. New York: New York City Criminal Justice Agency.
- Fagan, Jeffrey, Joseph G. Weis, Yu-The Cheng, and John K. Watters. 1987. *Drug and alcohol use, violent delinquency, and social bonding: Implications for theory and intervention*. San Francisco: URSA Institute.
- Falco, Mathea. 1992. *The making of a drug-free America: Programs that work*. New York: Times Books.
- Farrington, David P. 1995. The development of offending and antisocial behaviour from childhood: Key findings from the Cambridge study in delinquent development. *Journal of Child Psychology and Psychiatry* 36 (September): 929–964.
- Farrington, David P., Rolf Loeber, Magda Stouthamer-Loeber, Welmoet Van Kammen, and Laura Schmidt. 1996. Self-reported delinquency and a combined delinquency seriousness scale based on boys, mothers, and teachers: Concurrent and predictive validity for African-Americans and Caucasians. *Criminology* 34 (November): 493–517.
- Fendrich, Michael, Mary Ellen Mackesy-Amiti, Paul Goldstein, Barry Spunt, and Henry Brownstein. 1995. Substance involvement among juvenile murderers: Comparisons with older offenders based on interviews with prison inmates. *International Journal of the Addictions* 30:1363–1382.

Feucht, Thomas E., and Gabrielle M. Kyle. 1996. *Methamphetamine use among adult arrestees: Findings from the Drug Use Forecasting (DUF) program*. Washington, D.C.: U.S. Department of Justice, National Institute of Justice.

———. 1997. Gangs, violence, and drugs. Special issue. *Free Inquiry in Creative Sociology* 25 (May): 3–126.

———. 1996. Gangs, violence, and drugs. Special issue. *Free Inquiry in Creative Sociology* 24 (November): 99–204.

Friedman, Alfred S., Shirley Kramer, Cheryl Kreisher, and Samuel Granick. 1996. The relationships of substance abuse to illegal and violent behavior, in a community sample of young adult African American men and women (gender differences). *Journal of Substance Abuse* 8:379–402.

Goldberg, Peter. 1980. The Federal Government's response to illicit drugs, 1969–1978. In *The facts about drugs*, edited by the Drug Abuse Council. New York: Free Press.

Goldstein, Paul J. 1998. Drugs, violence, and Federal funding: A research odyssey. *Substance Use & Misuse* 33 (July): 1915–1936.

———. 1997. The relationship between drugs and violence in the United States of America. *World drug report: United Nations International Drug Control Program*. Oxford: Oxford University Press.

———. 1989. Drugs and violent crime. In *Pathways to criminal violence*, edited by N.A. Weiner and M.E. Wolfgang. Beverly Hills: Sage Publications.

———. 1985. The drugs/violence nexus: A tripartite conceptual framework. *Journal of Drug Issues* 15 (Fall): 493–506.

———. 1981. Getting over: Economic alternatives to predatory crime among street drug users. In *The drugs-crime connection*, edited by James A. Inciardi. Beverly Hills: Sage Publications.

Goldstein, Paul J., Henry H. Brownstein, Patrick J. Ryan, and Patricia A. Bellucci. 1989. Crack and homicide in New York City, 1988: A conceptually based event analysis. *Contemporary Drug Problems* 16 (Winter): 651–687.

Goldstein, Paul J., Lawrence J. Ouellet, and Michael Fendrich. 1992. From bag brides to skeezers: A historical perspective on sex-for-drugs behavior. *Journal of Psychoactive Drugs* 24:349–361.

Golub, Andrew L., and Bruce D. Johnson. 1999. Cohort changes in illegal drug use among arrestees in Manhattan: From the heroin injection generation to the blunts generation. *Substance Use & Misuse* 34 (13): 1733–1763.

Gorman, Dennis M. In press. Developmental processes. In *Handbook of alcohol dependence and alcohol-related problems*, edited by Nick Heather, Timothy J. Peters, and Timothy Stockwell. New York: John Wiley & Sons.

———. 1998. The irrelevance of evidence in the development of school-based drug prevention policy, 1986–1996. *Evaluation Review* 22:118–146.

———. 1993. “War on drugs” continues in United States under new leadership. *British Medical Journal* 307 (August): 369–371.

Gorman, Dennis M., Stephen W. Duffy, Stephanie Raine, and Carl L. Taylor. 1989. Level of agreement between questionnaire measures of alcohol dependence, alcoholism and problem drinking in a sample presenting at a specialist alcohol treatment service. *Drug and Alcohol Dependence* 24:227–232.

Gorman, Dennis M., Paul W. Speer, Erich W. Labouvie, and Apana P. Subaiya. 1998. Risk of assaultive violence and alcohol availability in New Jersey. *American Journal of Public Health* 88 (January): 97–100.

Gorman, Dennis M., and Helene R. White. 1995. You can choose your friends, but do they choose your crime? Implications of differential association theories for crime prevention policy. In *Criminology and public policy: Putting theory to work*, edited by Hugh Barlow. Boulder, Colorado: Westview Press.

Graham, Kathryn, Gail Schmidt, and Kelly Gillis. 1996. Circumstances when drinking leads to aggression: An overview of research findings. *Contemporary Drug Problems* 23:493–557.

Graham, Kathryn, Samantha Wells, and Paulette West. 1997. A framework for applying explanations of alcohol-related aggression to naturally occurring aggressive behavior. *Contemporary Drug Problems* 24 (Winter): 625–666.

Graham, Nanette, and Eric D. Wish. 1994. Drug use among female arrestees: Onset, patterns, and relationships to prostitution. *Journal of Drug Issues* 24:315–329.

Gramckow, Heike, Frederick Stinson, Gerald Williams, Darryl Bertolucci, and Susan Martin. 1995. Alcohol and violent crime: Findings from the National Crime Victimization Survey, United States, 1991. Paper presented at the International Conference on Social and Health Effects on Different Drinking Patterns, 13–17 November, Toronto, Canada.

Greenfeld, Lawrence A. 1998. *Alcohol and crime: An analysis of national data on the prevalence of alcohol involvement in crime*. NCJ 168632. Washington, D.C.: U.S. Department of Justice, Bureau of Justice Statistics.

Gustafson, Roland. 1993. What do experimental paradigms tell us about alcohol-related aggressive responding? Supplement. no. 11. *Journal of Studies on Alcohol* (September): 20–29.

Hamid, Ansley. 1991. From ganja to crack: Caribbean participation in the underground economy in Brooklyn, 1976–1986. Part 2. Establishment of the cocaine (and crack) economy. *International Journal of the Addictions* 26 (July): 729–738.

- Haney, Craig, and Philip Zimbardo. 1998. The past and future of U.S. prison policy: Twenty-five years after the Stanford prison experiment. *American Psychologist* 53 (July): 709–727.
- Harlow, Caroline Wolf. 1998. *Profile of jail inmates 1996*. Special Report, NCJ 164620. Washington, D.C.: U.S. Department of Justice, Bureau of Justice Statistics.
- Harrison, Lana D. 1992a. The drug-crime nexus in the USA. *Contemporary Drug Problems* (Summer): 203–245.
- . 1992b. Trends in illicit drug use in the United States: Conflicting results from national surveys. *International Journal of the Addictions* 27:817–847.
- Harrison, Lana D., and Michael Backenheimer. 1998. Editors' introduction: Evolving insights into the drug-crime nexus. *Substance Use & Misuse* 33 (July): 1763–1777.
- Harrison, Lana, and Charles Freeman. 1998. The drug-violence nexus among youth. Paper presented at the 1998 Annual Meeting of the American Society of Criminology, 11–14 November, Washington, D.C.
- Hartstone, Eliot, and Karen V. Hansen. 1984. The violent juvenile offender: An empirical portrait. In *Violent juvenile offenders: An anthology*, edited by Robert A. Mathias, Paul DeMuro, and Richard S. Allison. San Francisco: National Council on Crime and Delinquency.
- Hawkins, J. David, Richard F. Catalano, and Janet Y. Miller. 1992. Risk and protective factors for alcohol and other drug problems in adolescence and early adulthood: Implications for substance abuse prevention. *Psychological Bulletin* 11:64–105.
- Hellawell, Keith. 1995. The role of law enforcement in minimizing the harm resulting from illicit drugs. *Drug and Alcohol Review* 14:317–322.
- Hesselbrock, Victor M., Michie N. Hesselbrock, and James R. Stabenau. 1985. Alcoholism in men patients subtyped by family history and antisocial personality. *Journal of Studies on Alcohol* 46 (January): 59–64.
- Hindelang, Michael J., Travis Hirschi, and Joseph G. Weis. 1981. *Measuring delinquency*. Beverly Hills: Sage Publications.
- Huizinga, David, and Cynthia Jakob-Chien. 1998. The contemporaneous co-occurrence of serious violent juvenile offending and other problem behaviors. In *Serious & violent juvenile offenders: Risk factors and successful intervention*, edited by Rolf Loeber and David P. Farrington. Thousand Oaks, California: Sage Publications.
- Hunt, Dana E. 1990. Drugs and consensual crime: Drug dealing and prostitution. In *Drugs and crime*, edited by Michael Tonry and James Q. Wilson.

Vol. 13 of *Crime and justice: A review of research*. Chicago: University of Chicago Press.

Inciardi, James A. 1992. *The war on drugs II*. Mountain View, California: Mayfield.

———. 1990a. AIDS and drug use: Implications for criminal justice policy. In *Drugs, crime, and the criminal justice system*, edited by Ralph Weisheit. Cincinnati: ACJS/Anderson.

———. 1990b. The crack-violence connection within a population of hard-core adolescent offenders. In *Drugs and violence: Causes, correlates, and consequences*, edited by Mario De La Rosa, Elizabeth Y. Lambert, and Bernard Gropper. Research Monograph 103. Rockville, Maryland: U.S. Department of Health and Human Services, National Institute on Drug Abuse.

———. 1986. *The war on drugs*. Palo Alto, California: Mayfield.

Inciardi, James A., and Anne E. Pottieger. 1998. Drug use and street crime in Miami: An (almost) twenty-year retrospective. *Substance Use & Misuse* 33 (July): 1839–1870.

———. 1994. Crack-cocaine use and street crime. *Journal of Drug Issues* 24:273–292.

———. 1991. Kids, crack, and crime. *Journal of Drug Issues* 21:257–270.

Inciardi, James A., and Hilary L. Surratt. 1998. African Americans, crack and crime. In *The American drug scene: An anthology*, edited by James A. Inciardi and Karen McElrath. Los Angeles: Roxbury Publishing Company.

Ito, Tiffany A., Norman Miller, and Vicki E. Pollock. 1996. Alcohol and aggression: A meta-analysis on the moderating effects of inhibitory cues, triggering events, and self-focused attention. *Psychological Bulletin* 120:60–82.

Jessor, Richard, and Shirley Jessor. 1977. *Problem behavior and psychosocial development—A longitudinal study of youth*. New York: Academic Press.

Johnson, Bruce D., Paul J. Goldstein, Edward Preble, James Schmeidler, Douglas S. Lipton, and Thomas Miller. 1985. *Taking care of business: The economics of crime by heroin abusers*. Lexington, Massachusetts: Lexington Books.

Johnson, Bruce D., Andrew Golub, and Jeffrey Fagan. 1995. Careers in crack, drug use, drug distribution, and nondrug criminality. *Crime & Delinquency* 41 (July): 275–295.

Johnson, Bruce D., Mangai Natarajan, Eloise Dunlap, and Elsayed Elmoghazy. 1994. Crack abusers and noncrack abusers: Profiles of drug use, drug sales, and nondrug criminality. *Journal of Drug Issues* 24:117–141.

Johnson, Bruce D., Terry Williams, Kojo A. Dei, and Harry Sanabria. 1990. Drug abuse in the inner city: Impact on hard-drug users and the community.

In *Drugs and crime*, edited by Michael Tonry and James Q. Wilson. Vol. 13 of *Crime and justice: A review of research*. Chicago: University of Chicago Press.

Johnson, Bruce D., Eric Wish, James Schmeidler, and David H. Huizinga. 1986. The concentration of delinquent offending: Serious drug involvement and high delinquency rates. In *Crime rates among drug abusing offenders*, edited by Bruce D. Johnson and Eric Wish. New York: Interdisciplinary Research Center, Narcotic and Drug Research, Inc.

Johnston, Lloyd D., Patrick M. O'Malley, and Jerald G. Bachman. 1998. *National survey results on drug use from the Monitoring the Future study, 1975–1997*. Vol. 1. Washington, D.C.: U.S. Department of Health and Human Services.

Kandel, Denise B., and John A. Logan. 1984. Patterns of drug use from adolescence to young adulthood: Periods of risk for initiation, continued use, and discontinuation. *American Journal of Public Health* 74 (July): 660–666.

Kandel, Denise B., Ora Simcha-Fagan, and Mark Davies. 1986. Risk factors for delinquency and illicit drug use from adolescence to young adulthood. *Journal of Drug Issues* 16 (Winter): 67–90.

Kantor, Glenda Kaufman, and Nancy Asdigian. 1997. When women are under the influence: Does drinking or drug use by women provoke beatings by men? In *Recent developments in alcoholism, volume 13: Alcohol and violence*, edited by Marc Galanter. New York: Plenum Press.

Kaplan, Howard B., and Kelly R. Damphousse. 1995. Self-attitudes and antisocial personality as moderators of the drug use-violence relationship. In *Drugs, crime, and other deviant adaptations: Longitudinal studies*, edited by Howard B. Kaplan. New York: Plenum Press.

Khantzian, E.J. 1985. The self-medication hypothesis of addictive disorders: Focus on heroin and cocaine dependence. *American Journal of Psychiatry* 142 (November): 1259–1264.

Kleiman, Mark A.R., and Kerry D. Smith. 1990. State and local drug enforcement: In search of a strategy. In *Drugs and crime*, edited by Michael Tonry and James Q. Wilson. Vol. 13 of *Crime and justice: A review of research*. Chicago: University of Chicago Press.

Klein, Malcolm W., Cheryl L. Maxson, and Jody Miller, eds. 1995. *The modern gang reader*. Los Angeles: Roxbury Publishing Company.

Kouri, Elena M., Harrison G. Pope, Jr., Kenneth F. Powell, Paul S. Oliva, and Corbett Campbell. 1997. Drug use history and criminal behavior among 133 incarcerated men. *American Journal of Drug and Alcohol Abuse* 23:413–419.

Labouvie, Erich W., and Helene R. White. 1998. Drug sequences, age of onset, and use trajectories: Antecedents and adult use outcomes. Paper presented at the Conference on Stages and Pathways of Drug Involvement: Examining the Gateway Hypothesis, 28 June, Los Angeles.

- Laub, John H., and Robert J. Sampson. 1993. Turning points in the life course: Why change matters to the study of crime. *Criminology* 31 (August): 301–325.
- Lee, W. Vernon, and Stephen P. Weinstein. 1997. How far have we come? A critical review of the research on men who batter. In *Recent developments in alcoholism, volume 13: Alcohol and violence*, edited by Marc Galanter. New York: Plenum Press.
- Leonard, Kenneth E. 1993. Drinking patterns and intoxication in marital violence: Review, critique, and future directions for research. In *Alcohol and interpersonal violence: Fostering multidisciplinary perspectives*, edited by Susan E. Martin. Rockville, Maryland: U.S. Department of Health and Human Services, National Institutes of Health.
- Levine, Felice J., and Katherine J. Rosich. 1996. *Social causes of violence: Crafting a science agenda*. Washington, D.C.: American Sociological Association.
- Lipsey, Mark W., David B. Wilson, Mark A. Cohen, and James H. Derzon. 1997. Is there a causal relationship between alcohol use and violence? A synthesis of evidence. In *Recent developments in alcoholism, volume 13: Alcohol and violence*, edited by Marc Galanter. New York: Plenum Press.
- Lipton, Douglas S., and Bruce D. Johnson. 1998. Smack, crack, and score: Two decades of NIDA-funded drugs and crime research at NDRI, 1974–1994. *Substance Use & Misuse* 33 (July): 1779–1815.
- MacCoun, Robert, and Peter Reuter. 1997. Interpreting Dutch cannabis policy: Reasoning by analogy in the legalization debate. *Science* 278 (October): 47–52.
- MacCoun, Robert, Peter Reuter, and Thomas Schelling. 1996. Assessing alternative drug control regimes. *Journal of Policy Analysis and Management* 15:330–352.
- McBride, Duane C., and Clyde B. McCoy. 1982. Crimes and drugs: The issues and literature. *Journal of Drug Issues* (Spring): 137–151.
- McBride, Duane C., and J.A. Swartz. 1990. Drugs and violence in the age of crack cocaine. In *Drugs, crime, and the criminal justice system*, edited by Ralph Weisheit. Cincinnati: ACJS/Anderson.
- McCord, Joan, and Margaret E. Ensminger. 1997. Multiple risks and comorbidity in an African-American population. *Criminal Behaviour and Mental Health* 7:339–352.
- McGlothlin, W.H., D. Anglin, and B.D. Wilson. 1978. Narcotic addiction and crime. *Criminology* 16:293–316.
- Miczek, Klaus A., J.F. DeBold, M. Haney, J. Tidey, J. Vivian, and E.M. Weerts. 1994. Alcohol, drugs of abuse, aggression, and violence. In *Understanding and preventing violence*, edited by Albert J. Reiss and Jeffrey A. Roth. Vol. 3. Washington, D.C.: National Academy Press.

- Midford, Richard, Nyanda McBride, and Geoff Munro. 1998. Harm reduction in school drug education: Developing an Australian approach. *Drug and Alcohol Review* 17:319–328.
- Mieczkowski, Tom. 1994. The experiences of women who sell crack: Some descriptive data from the Detroit crack ethnography project. *Journal of Drug Issues* 24:227–248.
- Miller, Brenda A., Eugene Maguin, and William R. Downs. 1997. Alcohol, drugs, and violence in children's lives. In *Recent developments in alcoholism, volume 13: Alcohol and violence*, edited by Marc Galanter. New York: Plenum Press.
- Moffitt, Terrie E. 1993. Adolescence-limited and life-course-persistent antisocial behavior: A developmental taxonomy. *Psychological Review* 100:674–701.
- Moore, Joan. 1990. Gangs, drugs, and violence. In *Drugs and violence: Causes, correlates, and consequences*, edited by Mario De La Rosa, Elizabeth Y. Lambert, and Bernard Gropper. Research Monograph 103. Rockville, Maryland: U.S. Department of Health and Human Services, National Institute on Drug Abuse.
- Moore, Mark H. 1990. Supply reduction and drug law enforcement. In *Drugs and crime*, edited by Michael Tonry and James Q. Wilson. Vol. 13 of *Crime and justice: A review of research*. Chicago: University of Chicago Press.
- Musto, David F. 1991. Opium, cocaine, and marijuana in American history. *Scientific American* (July): 40–47.
- Nadelmann, Ethan. 1998. Challenging the global prohibition regime. *International Journal of Drug Policy* 9:85–93.
- National Commission on Marijuana and Drug Abuse. 1973. *Drug use in America: Problem in perspective*. 2d report. Washington, D.C.: U.S. Government Printing Office.
- Nunes-Dinis, Maria C., and Constance Weisner. 1997. Gender differences in the relationship of alcohol and drug use to criminal behavior in a sample of arrestees. *American Journal of Drug and Alcohol Abuse* 23:129–141.
- Nurco, David N. 1998. A long-term program of research on drug use and crime. In *Substance Use & Misuse* 33 (July): 1817–1837.
- Nurco, David N., Thomas E. Hanlon, Timothy W. Kinlock, and Karen R. Duszynski. 1988. Differential criminal patterns of narcotic addicts over an addiction career. *Criminology* 26 (August): 407–423.
- Nurco, David N., John C. Shaffer, John C. Ball, and Timothy W. Kinlock. 1984. Trends in the commission of crime among narcotic addicts over successive periods of addiction. *American Journal of Drug and Alcohol Abuse* 10:481–489.

- Osgood, D. Wayne. 1994. Drugs, alcohol, and adolescent violence. Paper presented at the 1994 Annual Meeting of the American Society of Criminology, 9–12 November, Miami.
- Parker, Robert N. 1993. The effects of context on alcohol and violence. *Alcohol Health & Research World* 17:117–122.
- Parker, Robert N., and Kathleen Auerhahn. 1999. Drugs, alcohol, and homicide: Issues in theory and research. In *A sourcebook of social research*, edited by M.D. Smith and M.A. Zahn. Beverly Hills: Sage Publications.
- . 1998. Alcohol, drugs, and violence. *Annual Review of Sociology* 24:291–311.
- Parker, Robert N., and Linda-Anne Rebhun. 1995. *Alcohol and homicide: A deadly combination of two American traditions*. Albany: State University of New York Press.
- Pernanen, Kai. 1991. *Alcohol in human violence*. New York: Guilford Publications.
- . 1981. Theoretical aspects of the relationship between alcohol use and crime. In *Drinking and crime*, edited by J.J. Collins. New York: Guilford Publications.
- Pihl, Robert O., Jordan B. Peterson, and M.A. Lau. 1993. A biosocial model of the alcohol-aggression relationship. Supplement no. 11. *Journal of Studies on Alcohol* (September): 128–139.
- Rand, Michael. 1998. *Criminal victimization 1997: Changes 1996–97 with trends 1993–97*. NCJ 173385. Washington, D.C.: U.S. Department of Justice, Bureau of Justice Statistics.
- Rand, Michael, James P. Lynch, and David Cantor. 1997. *Criminal victimization 1973–95*. NCJ 163069. Washington, D.C.: U.S. Department of Justice, Bureau of Justice Statistics.
- Rasmussen, David W., and Bruce B. Benson. 1999. Reducing the harms of drug policy: An economic perspective. *Substance Use & Misuse* 34:49–67.
- Regier, Darrel A., Mary E. Farmer, Donald S. Rae, Ben Z. Locke, Samuel J. Keith, Lewis L. Judd, and Frederick K. Goodwin. 1990. Comorbidity of mental disorders with alcohol and other drug abuse: Results from the Epidemiologic Catchment Area (ECA) study. *Journal of the American Medical Association* 264 (November): 2511–2518.
- Reinarman, Craig, and Harry Levine. 1989. Crack in context: Politics and media in the making of a drug scare. *Contemporary Drug Problems* 16 (Winter): 535–577.
- Reiss, Albert J., Jr., and Jeffrey A. Roth, eds. 1993. *Understanding and preventing violence*. Washington D.C.: National Academy Press.

- Reuter, Peter. 1997. Why can't we make prohibition work better? Some consequences of ignoring the unattractive. *Proceedings of the American Philosophical Society* 141:262–275.
- Reuter, Peter, and Jonathan P. Caulkins. 1995. Redefining the goals of national drug policy: Recommendations from a working group. *American Journal of Public Health* 85 (August): 1059–1063.
- Roizen, Judith. 1993. Issues in the epidemiology of alcohol and violence. In *Alcohol and interpersonal violence: Fostering multidisciplinary perspectives*, edited by Susan E. Martin. NIAAA Research Monograph no. 24. Rockville, Maryland: U.S. Department of Health and Human Services, National Institutes of Health.
- Roncek, Dennis W., and P.A. Maier. 1991. Bars, blocks, and crimes revisited: Linking the theory of routine activities to the empiricism of "hot spots." *Criminology* 29 (November): 725–753.
- Roncek, Dennis W., and Mitchell A. Pravatiner. 1989. Additional evidence that taverns enhance nearby crime. *Sociology and Social Research* 73:185–188.
- Rouse, John J., and Bruce D. Johnson. 1991. Hidden paradigms of morality in debates about drugs: Historical and policy shifts in British and American drug policies. In *The drug legalization debate*, edited by James A. Inciardi. Thousand Oaks, California: Sage Publications.
- Sampson, Robert J., Stephen W. Raudenbush, and Felton Earls. 1997. Neighborhoods and violent crime: A multilevel study of collective efficacy. *Science* 277 (August): 918–924.
- Scribner, Richard A., Deborah Cohen, Stephen Kaplan, and Susan Allen. 1999. Alcohol availability and homicide in New Orleans: Conceptual considerations for small area analysis of the effect of alcohol outlet density. *Journal of Studies on Alcohol* 60:310–316.
- Scribner, Richard A., David P. MacKinnon, and James H. Dwyer. 1995. The risk of assaultive violence and alcohol availability in Los Angeles County. *American Journal of Public Health* 85 (March): 335–340.
- Shannon, Lyle W. 1998. *Alcohol and drugs, delinquency and crime: Looking back to the future*. New York: St. Martin's Press.
- Sherman, Lawrence W., Patrick R. Gartin, and Michael E. Buerger. 1989. Hot spots of predatory crime: Routine activities and the criminology of place. *Criminology* 27 (February): 27–55.
- Single, Eric W. 1989. The impact of marijuana decriminalization: An update. *Journal of Public Health Policy* 10:456–466.

- Skog, Ole-Jorgen. 1991. Drinking and the distribution of alcohol consumption. In *Society, culture, and drinking patterns reexamined*, edited by David J. Pittman and Helene Raskin White. New Brunswick: Rutgers, The State University of New Jersey, Center of Alcohol Studies.
- Skogan, Wesley G. 1990. *Disorder and decline: Crime and the spiral of decay in American neighborhoods*. Berkeley: University of California Press.
- Snyder, Howard N. 1998. *Juvenile arrests 1997*. Bulletin, NCJ 173938. Washington D.C.: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention.
- Sommers, Ira, and Deborah R. Baskin. 1993. The situational context of violent female offending. *Journal of Research in Crime and Delinquency* 30 (May): 136–162.
- Sowell, Thomas. 1995. *The vision of the anointed: Self-congratulation as a basis for social policy*. New York: Basic Books.
- Speer, Paul W., Dennis M. Gorman, Erich W. Labouvie, and Mark J. Ontkush. 1998. Violent crime and alcohol availability: Relationships in an urban community. *Journal of Public Health Policy* 19 (Autumn): 303–318.
- Spunt, Barry J., Paul J. Goldstein, Patricia A. Bellucci, and Thomas Miller. 1990. Race/ethnicity and gender differences in the drugs-violence relationship. *Journal of Psychoactive Drugs* 22:293–303.
- Spunt, Barry, Paul Goldstein, Henry Brownstein, Michael Fendrich, and Sandra Langley. 1994. Alcohol and homicide: Interviews with prison inmates. *Journal of Drug Issues* 24:143–163.
- Stark, Rodney. 1987. Deviant places: A theory of the ecology of crime. *Criminology* 25 (November): 893–909.
- Tinklenberg, Jared R., Peggy Murphy, Patricia L. Murphy, and Adolf Pfefferbaum. 1981. Drugs and criminal assaults by adolescents: A replication study. *Journal of Psychoactive Drugs* 13:277–287.
- Trebach, A.S. 1993. *Legalize it? Debating American drug policy*. Washington D.C.: American University Press.
- U.S. Department of Education. 1987. *What works: Schools without drugs*. Washington, D.C.
- U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration. 1999. *National Household Survey on Drug Abuse main findings 1997*. Washington, D.C.
- U.S. Department of Justice, Bureau of Justice Statistics. 1994a. *Fact sheet: Drug data summary*. NCJ 148213. Washington D.C.

- . 1992a. *Drugs, crime, and the justice system: A national report*. NCJ 133652. Washington, D.C.
- . 1989–91, 1992b, 1993, 1994b, 1995–98. *Sourcebook of criminal justice statistics*. Washington, D.C.
- . 1983. *Prisoners in 1982*. NCJ 87933. Washington D.C.
- U.S. Department of Justice, Federal Bureau of Investigation. 1997. *Crime in the United States, 1996*. Uniform Crime Reports. Washington, D.C.
- U.S. Department of Justice, National Institute of Justice. 1998. *Arrestee Drug Abuse Monitoring program: 1997 annual report on adult and juvenile arrestees*. Research Report, NCJ 171672. Washington, D.C.
- . 1989–97. *Drug Use Forecasting annual report*. Washington, D.C.
- Valdez, Avelardo, Charles D. Kaplan, Russell L. Curtis, Jr., and Zenong Yin. 1995. Illegal drug use, alcohol, and aggressive crime among Mexican-American and white male arrestees in San Antonio. *Journal of Psychoactive Drugs* 27:135–143.
- Valdez, Avelardo, Zenong Yin, and Charles D. Kaplan. 1997. A comparison of alcohol, drugs, and aggressive crime among Mexican-American, black, and white male arrestees in Texas. *American Journal of Drug and Alcohol Abuse* 23:249–265.
- Van Kammen, Welmoet B., and Rolf Loeber. 1994. Are fluctuations in delinquent activities related to the onset and offset in juvenile illegal drug use and drug dealing? *Journal of Drug Issues* 24:9–24.
- Virkkunen, Matti. 1977. Arrests for drunkenness and recidivism in juvenile delinquents. *British Journal of Addiction* 72 (September): 201–204.
- Virkkunen, Matti, and Markku Linnoila. 1993. Brain serotonin, type II alcoholism, and impulsive violence. Supplement no. 11. *Journal of Studies on Alcohol* (September): 163–169.
- Waldorf, Dan. 1998. Misadventures in the drug trade. *Substance Use & Misuse* 33 (July): 1957–1991.
- Watters, John K., Craig Reinerman, and Jeffrey Fagan. 1985. Causality, context, and contingency relationships between drug abuse and delinquency. *Contemporary Drug Problems* 12:351–373.
- Weingardt, Kenneth R., and G. Alan Marlatt. 1998. *Harm reduction and public policy*. In *Harm reduction: Pragmatic strategies for managing high-risk behaviors*, edited by G. Alan Marlatt. New York: Guilford Publications.
- Weissman, James C., Paul L. Katsampes, and Thomas A. Giacinti. 1974. Opiate use and criminality among a jail population. *Addictive Diseases* 1:269–281.

- White, Helene Raskin. 1997a. Alcohol, illicit drugs, and violence. In *Handbook of antisocial behavior*, edited by David M. Stoff, James Breiling, and Jack D. Maser. New York: John Wiley & Sons.
- . 1997b. Longitudinal perspective on alcohol use and aggression during adolescence. In *Recent developments in alcoholism, volume 13: Alcohol and violence*, edited by Marc Galanter. New York: Plenum Press.
- . 1990. The drug use-delinquency connection in adolescence. In *Drugs, crime, and criminal justice*, edited by Ralph Weisheit. Cincinnati: Anderson Publishing Company.
- White, Helene Raskin, John Brick, and Stephen Hansell. 1993. A longitudinal investigation of alcohol use and aggression in adolescence. Supplement no. 11. *Journal of Studies on Alcohol* (September): 62–77.
- White, Helene Raskin, and Stephen Hansell. 1998. Acute and long-term effects of drug use on aggression from adolescence into adulthood. *Journal of Drug Issues* 28:837–858.
- . 1996. The moderating effects of gender and hostility on the alcohol-aggression relationship. *Journal of Research in Crime and Delinquency* 33 (November): 450–470.
- White, Helene Raskin, Valerie Johnson, and Carole G. Garrison. 1985. The drug-crime nexus among adolescents and their peers. *Deviant Behavior* 6:183–204.
- White, Helene R., and Erich W. Labouvie. 1994. Generality versus specificity of problem behavior: Psychological and functional differences. *Journal of Drug Issues* 24:55–74.
- White, Helene Raskin, Rolf Loeber, Magda Stouthamer-Loeber, and David P. Farrington. 1999. Developmental associations between substance use and violence. *Development and Psychopathology* 11:785–803.
- White, Helene Raskin, Robert J. Pandina, and Randy L. LaGrange. 1987. Longitudinal predictors of serious substance use and delinquency. *Criminology* 25 (August): 715–740.
- Widom, Cathy Spatz. 1993. Child abuse and alcohol use and abuse. In *Alcohol and interpersonal violence: Fostering multidisciplinary perspectives*, edited by Susan E. Martin. NIAAA Research Monograph no. 24. Rockville, Maryland: U.S. Department of Health and Human Services, National Institutes of Health.
- Wieczorek, William F., John W. Welte, and Ernest L. Abel. 1990. Alcohol, drugs, and murder: A study of convicted homicide offenders. *Journal of Criminal Justice* 18:217–227.
- Wilson, James Q. 1991. *On character*. Washington, D.C.: AEI Press.
- Wren, Christopher S. 1997. New voice in the drug debate seeks to lower the volume: Group calls for moderation and pragmatism. *New York Times*, 1 September.

Yu, Jiang, and William R. Williford. 1994. Alcohol, other drugs, and criminality: A structural analysis. *American Journal of Drug and Alcohol Abuse* 20:373–393.

Zhang, Lening, William F. Wieczorek, and John W. Welte. 1997. The nexus between alcohol and violent crime. *Alcoholism: Clinical and Experimental Research* 21:1264–1271.

Zucker, Robert A. 1994. Pathways to alcohol problems and alcoholism: A developmental account of the evidence for multiple alcoholisms and for contextual contributions to risk. In *The development of alcohol problems: Exploring the biopsychosocial matrix of risk*, edited by Robert A. Zucker, Gayle Boyd, and Jan Howard. NIAAA Research Monograph no. 26. Rockville, Maryland: U.S. Department of Health and Human Services.

Criminal Justice Discovers Information Technology

by Maureen Brown

During the last half of the 20th century, information technology became a central force in the field of criminal justice. Information, with its associated technologies, provided a critical support structure for operations. Yet, it also created new dilemmas for criminal investigations, prosecutions, and prevention. While information technology assumed a major role in supporting the socioeconomic framework, it also mandated a fundamental rethinking of legislative policies pertaining to security, privacy, and criminal activity. The rise of the information-centric economy brought a host of opportunities and challenges to the field of criminal justice. Issues pertaining to information technology operations, policy, and criminology pose substantial challenges to the field of criminal justice as it enters the next millennium.

Maureen Brown is Associate Professor at the University of North Carolina at Charlotte.

The shift from an industrial to an information-based economy was one of the most significant changes occurring in many nations in the last 20 years of the 20th century. By the turn of the century, the production, sale, and service of information and its associated technologies provided a critical support structure to the world economy. Given the promise that information technology might afford, global investments in information technology grew to more than \$500 billion annually (G2 Research 1997). This chapter considers the growth of information technology (IT), its adoption by various actors in the criminal justice system, and the implications for the goals of and expectations for the criminal justice system.

In addition to the technological challenges, organizational hurdles impeded procurement, implementation, operations, and maintenance, regardless of organization size. For example, large organizations experienced problems with system design and personnel training; small jurisdictions suffered from funding and expertise limitations.

The chapter has two sections. The first section uses a timeline to describe the growth of IT within various sectors of the criminal justice system. The operational aspect elaborates on the extent to which computer technology has permeated police, court, and corrections agencies to promote service delivery. Conversely, the criminal perspective examines issues surrounding computer crime and its impacts on policies and programs. Finally, the civil side examines the changes pertaining to civil rights. Exhibit 1 provides a synopsis of many of the milestones that mark the technological changes of the last half of the century.

The second section discusses major hurdles and challenges confronting the field of criminal justice. Although computer-based innovations began as tools to advance transaction-based processes—a goal that was easily achieved—by the end of the century, criminal justice professionals pursued more ambitious goals for IT, hoping that IT would enhance organizational knowledge. Managers expected cases, problems, and events to be identified, tracked, and evaluated more easily, thereby improving productivity and performance. In striving to meet the expectations, however, several hurdles were encountered at every stage of the IT-adoption process. In addition to the technological challenges, organizational hurdles

impeded procurement, implementation, operations, and maintenance, regardless of organization size. For example, large organizations experienced problems with system design and personnel training; small jurisdictions suffered from funding and expertise limitations. Specifically, the next section sheds light on

Exhibit 1. Major information technology events and implementation milestones in the criminal justice system

- 1946** - The first large-scale electronic general purpose digital computer was created by Dr. John W. Mauchly and J. Presper Eckert: the Electronic Numerical Integrator and Computer (ENIAC).
- 1951** - The first commercially available electronic digital computer (UNIVAC I) is introduced by Remington Rand. The UNIVAC I correctly predicts that Dwight D. Eisenhower will win the presidential election.
- 1952** - Dr. Grace Hopper invents the first high-level programming language.
- 1955** - The New Orleans police department installs the first electronic data-processing machine, a vacuum tube-operated calculator with a punch card sorter and collator that summarizes arrests and warrants.
- 1958** - Second-generation computers are built with transistors replacing vacuum tubes. There were roughly 2,500 computers in use in the United States.
- 1960** - The programming language COBOL is developed by a committee headed by Dr. Hopper.
 - The St. Louis Police Department installs the first computer-aided dispatch system.
- 1964** - The computer chip is introduced, leading to the third generation of computer machines. By 1964, the number of computers in use in the United States has grown to 18,000.
 - The Crime Commission report produces recommendations on police technology.
 - The Federal Bureau of Investigation inaugurates the National Crime Information Center (NCIC), providing a national computerized filing system on wanted persons, stolen vehicles, weapons, and other items of value. The system processes more than 6,580 transactions per day.
 - Allegheny County, Pennsylvania, installs data-processing equipment to improve operations in civil court.
- 1966** - The National Law Enforcement Telecommunications System, a message-switching facility that links all State police computers with the exception of Hawaii, is established.
 - The Freedom of Information Act (FOIA) passes.
- 1967** - The Advance Regional Justice Information system is established by the San Diego police department for clearing investigative cases.

continued

Exhibit 1 (continued)

- 1968** - The first use of an 8-inch floppy magnetic storage disk is demonstrated by Alan Shugart of IBM.
 - The Omnibus Crime Control Act establishes the Law Enforcement Assistance Administration (LEAA) program, which includes a mandate to increase the use of IT.
 - AT&T announces the creation of 911.
 - The National Institute of Justice (NIJ) is created to, among other goals, "advance technology assimilation."
- 1969** - The ARPANET network, predecessor to the Internet, is established.
 - The first microprocessor chip is developed by Dr. Ted Hoff.
 - The National Consortium for Justice Information and Statistics is established.
- 1970** - The fourth generation of computers arrives with the invention of the large-scale integration chip, which contains roughly 15,000 circuits.
 - LEAA begins to spur technology innovation efforts over the next 12 years by providing roughly \$50 million to State and local law enforcement agencies.
 - The Fair Credit Reporting Act of 1970 passes.
- 1971** - The microprogrammable computer chip is developed by Dr. Ted Hoff.
 - Intel introduces the first microprocessor, the 4004, capable of 60,000 operations per second.
 - The National Center for State Courts (NCSC) is created as an independent nonprofit organization dedicated to improving the administration of justice.
- 1973** - The first court-operated, computer-aided transcript (CAT) system is installed.
- 1974** - C programming is developed.
 - The Federal Privacy Act of 1974 passes.
- 1975** - IBM introduces the first laser printer.
 - The first commercially successful microcomputer, the Altair, becomes available.
 - One of the first major studies investigates local-level police, corrections, and courts information technology activities.
- 1976** - Steve Wozniak and Steve Jobs build the first Apple computer.
- 1977** - NCSC begins the Court Improvement Through Applied Technology Project.

Exhibit 1 (continued)

- 1978** - NCSC publishes *Computer Use in the Courts: Planning, Procurement, and Implementation*.
- 1979** - The first spreadsheet, VisiCalc, is introduced.
 - CompuServe, the first public online service, is founded.
 - NCSC survey reveals that 500 State-level courts are employing data-processing techniques while 100 courts are actively participating in local criminal justice information systems.
- Mid- to late 1970s** - LEAA funds projects such as State Judicial Information System and Gavel-A National Model Trial Court Information System.
- 1980** - The first hard drive, the Winchester, is introduced, revolutionizing storage for personal computers.
 - Bill Gates, working for IBM, develops MS-DOS.
 - Enhanced 911 is developed.
 - The Privacy Protection Act of 1980 passes.
- 1981** - The Silicon 32-bit chip is produced.
 - IBM introduces the personal computer; more than 300,000 are sold in the United States.
 - The Police Foundation Survey reports that almost all law enforcement agencies serving 1 million or more persons have some sort of computerized searching capability.
- 1982** - A total of 3,275,000 personal computers are sold.
 - Hayes introduces the 300-bps smart modem.
 - LEAA is abolished.
 - Compaq, Inc., is founded.
- 1983** - Seven percent of U.S. households own computers; in 5 years, the number jumps to 20 percent.
- 1984** - IBM introduces the Intel 80286 microprocessor.
 - Apple introduces the Macintosh computer.
 - NCSC releases the State Judicial Information System Project report.

continued

Exhibit 1 (continued)

- NCSC hosts the first National Court Technology conference.
- Congress creates the State Justice Institute (SJI) to foster joint innovations in Federal and State courts.
- The Justice Assistance Act creates the Office of Justice Programs, which currently consists of the Bureau of Justice Assistance (BJA), the Bureau of Justice Statistics, NIJ, the Office of Juvenile Justice and Delinquency Prevention (OJJDP), and the Office for Victims of Crime (OVC).
- The Computer Fraud and Abuse Act of 1984 passes.

1986 - SJI opens.

- The International City Management Association releases a second major study examining law enforcement, corrections, and courts systems in local government.
- NIJ funds first assessment of the impact of a map-based crime analysis system in Chicago.
- The Computer Fraud and Abuse Act of 1986 and the Electronic Communications Privacy Act of 1986 pass.

1987 - The 80386 microprocessor is introduced.

- SJI begins awarding grants for technology innovations.

1988 - The Computer Matching and Privacy Protection Act of 1988 passes.

1989 - The Intel 486 becomes the world's first 1 million transistor microprocessor. At a size of .4" x .6", it can execute more than 15 million instructions per second.

- Tim Berners-Lee invents the first Internet-based hypermedia that becomes known as the World Wide Web (WWW).
- NCSC and SJI release the first issue of *Court Technology Bulletin*, a bimonthly publication on technology in the courts.
- NCSC's Technology Information Exchanges Services begins.
- The Forum on the Advancement of Court Technology (FACT) is formed to facilitate dialogue between vendors and court managers regarding the application of technology in court operations.

Exhibit 1 (continued)

- 1990** - Microsoft Corporation releases Windows 3.0, selling hundreds of thousands of copies. More than 54 million computers are in use in the United States.
 - The Technology Information Services (TIES) program fields more than 1,000 requests for information on IT.
 - TIES opens the Court Technology Laboratory.
- 1991** - The World Wide Consortium releases standards that describe the framework for linking documents on different computers.
 - Senator Al Gore proposes the High Performance Computing and Communications (HPCC) initiative for building a high-speed "digital highway" for Federal agencies.
 - The U.S. Department of Justice establishes the Computer Crime Unit within the Criminal Division.
- 1992** - Microsoft releases Windows 3.1.
- 1993** - The successor to the Intel 486, the Pentium microprocessor, is introduced. It contains 3.1 million transistors and is capable of performing 112 million instructions per second.
 - The HPCC initiative is significantly expanded to the National Information Infrastructure, a broadband digital network allowing universal access.
 - The White House launches its first Web page.
 - Two-thirds of all police departments are using computers in criminal investigations, crime analysis, budgeting, and staff allocation.
 - More than 90 percent of police departments serving populations of more than 50,000 are using computers for criminal investigation, budgeting, dispatch, and staff allocation.
 - The College of William and Mary unveils Courtroom 21.
- 1994** - Netscape Navigator 1.0 is launched.
 - The Violent Crime Control and Law Enforcement Act of 1994 is passed.
 - Memorandum between the U.S. Department of Justice and the U.S. Department of Defense to conduct joint research on information systems development efforts is written.
 - NIJ opens the National Law Enforcement and Corrections Technology Center (NLECTC) to promote the use of technology in criminal justice.

continued

Exhibit 1 (continued)

- *Technology Beat*, a serial published by NLECTC focusing on technology in criminal justice, is first published.
- The Computer Abuse Amendments Act of 1994 passes.
- 1995** - Microsoft releases Windows 95.
- TIES TIS fields more than 2,000 requests for information on IT.
- Justice Information Network (JUSTNET) is established to promote information collection and dissemination.
- NIJ establishes the Office of Science and Technology.
- The National Criminal Justice Reference Service (NCJRS) goes online.
- BJA funds the National Criminal History Program, awarding a total of \$112 million to every State to improve criminal history information systems.
- Roughly 83 percent of all State prosecutors use computers.
- 1996** - Microsoft releases Windows NT 4.0.
- Telecommunications Act of 1996 passes.
- More than 76 percent of full-time large prosecutors' offices and 70 percent of medium offices have adopted some sort of integrated computer system. Systems typically include courts, law enforcement, and district attorney's offices.
- The Computer Abuse Amendments Act of 1996 passes.
- 1997** - Internet Explorer 4.0 is released.
Approximately 50 million users are connected to the WWW.
- 1998** - Windows 98 is shipped.
- E-commerce (electronic commerce) allows buyers to obtain merchandise over the Internet.
- More than 10 million people are telecommuting.
- The Crime Identification Technology Act of 1998 (Public Law 105-251) passes, making more than \$1.25 billion available for integrated justice systems.
- 1999** - Intel releases the Pentium III microprocessor, which provides enhanced multimedia capabilities.
- Microsoft introduces Office 2000.

the operational, criminal, and civil challenges as the criminal justice system struggles to take full advantage of the information age.

Some of the difficulties agencies experience in taking advantage of IT stem from the rapidity and scope of its developments. In a span of 25 years, the computer industry grew to comprise 10 percent of the gross domestic product in the United States. In two short decades, the field of IT became larger than the auto, steel, mining, petrochemical, and natural gas industries combined. For example, between 1988 and 1995, IT sales grew 14 percent in constant dollars (U.S. Department of Commerce 1997), with the Government sector accounting for roughly \$80 billion every year in IT expenditures (G2 Research 1997). By 2000, IT represents a major global economic support structure (Tapscott and Caston 1993). The discussion that follows highlights the changes that occurred within the fields of IT and the resulting impacts on police, courts, and corrections.

IT adoption and implementation creates both benefits and costs. IT can assist with efficiency and productivity gains by allowing tasks to be conducted in parallel, by eliminating steps in a process, and by reducing the amount of time it takes to conduct a task. IT can also aid decisionmaking through its ability to store, condense, and display large quantities of information for developing and evaluating operational initiatives. However, the benefits of IT do not come without significant resource investments. The hurdles and challenges of adoption and implementation can negate the recognition of benefits. On the downside, IT requires substantial investments in training, maintenance, and coordination. In addition to these operational costs, IT can introduce security breaches. Data that were once on paper in filing cabinets behind locked doors are now stored on hardware that may be vulnerable to theft and destruction. Yet another downside of IT relates to its role in crime. As discussed later, the adoption of IT has created additional incentives and mechanisms for the perpetration of crimes such as embezzlement, pornography, and sabotage. Although this chapter concentrates on the operational benefits of IT and the civil and criminal impacts, it is recognized that the costs of IT for society as well as criminal justice agencies and other organizations are substantial.

On the downside, IT requires substantial investments in training, maintenance, and coordination. In addition to these operational costs, IT can introduce security breaches. Data that were once on paper in filing cabinets behind locked doors are now stored on hardware that may be vulnerable to theft and destruction.

The 1960s and 1970s—The Age of Discovery

The operational stream

Prior to the 1970s, computer technology made tremendous theoretical gains, laying the foundation for its future application to various industries and occupations. These theoretical gains between the 1940s and 1970s led to significant technological advances from the 1960s through the 1990s. Pivotal moments included the release of the first commercially available computer in 1951; the New Orleans Police Department's adoption of the first arrest and warrant computer system in 1955; and the St. Louis Police Department's installation of the first computer-aided dispatch system in 1960.

In 1964, advances appeared in both computer design and application of computers to criminal justice: The third generation of computer machines appeared as the computer chip was introduced; the number of computers in the United States grew to 18,000; Allegheny County, Pennsylvania, installed the first court-based data processing system; and the Federal Bureau of Investigation (FBI) launched the National Crime Information Center (NCIC). NCIC provided the first nationwide computer filing system containing wanted persons, stolen vehicles, and weapons. At its inception, the system provided more than 6,580 transactions per day to 15 different agencies.

By 1966, the National Law Enforcement Telecommunications System was adopted, linking all State police departments in the continental United States. In 1967, San Diego police began using computer technology to clear investigative cases. At the same time, President Lyndon Johnson's Crime Commission Report contained more than 200 recommendations, 11 of which dealt specifically with police technology.

The Omnibus Crime Control Act of 1968 established the Law Enforcement Assistance Administration Program (LEAA). Over the next 13 years, LEAA disbursed more than \$50 million in grant funding for police technology (Northrop, Kraemer, and King 1995). Spurred in part by the findings of the Crime Commission, a long-term subsidy program administered by the LEAA provided seed money for technology adoption (SEASKATE 1998).

Also in 1968, the National Institute of Justice (NIJ) was created. One of its many missions was to advance technology assimilation within criminal justice agencies. AT&T also unveiled the 911 system. Heralded as a pivotal event in police operations, the 911 function encouraged broader use of computer technology in law enforcement.

The first microcomputer chip was developed in 1969. The National Consortium for Justice Information and Statistics (NCJIS; a private, nonprofit membership organization dedicated to improving the criminal justice system through the effective application of information and identification technology) also appeared in 1969 (http://www.corp.search.org/About_SEARCH.htm).

In the 1970s, IT continued to advance, and the criminal justice system began using computers to streamline operations and enhance customer service. The decade began with the arrival of the fourth generation of computers, which used integration chips with 10,000 more circuits than the chips of 5 years earlier. In 1971, Intel released the first microprocessor capable of 60,000 operations per second, and the National Center for State Courts (NCSC) was established to promote technology innovation in the courts.

In 1975, one of the first major studies investigating computer technology in criminal justice, based on the computerization efforts of 310 counties and 403 cities, was released by the University of California's Public Policy Research Organization (PPRO) (Matthews, Dutton, and Kraemer 1976). The study found that despite advances in the IT field, local criminal justice bureaucracies did not rely heavily on computer systems to support many critical functions.

In the 1970s, computer-based automation had been adopted more widely by law enforcement agencies than corrections and courts. As shown in exhibit 2, uniform crime reporting, parking tickets, and traffic accidents were the most common applications used by county law enforcement agencies. For cities, the most commonly computerized functions in law enforcement were uniform crime reporting, traffic violations, and criminal offense files. In total, across the 713 jurisdictions, uniform crime reporting (27 percent), parking tickets (27 percent), and traffic violations (24 percent) were the most frequently automated functions. Although large urban departments appeared to be recognizing the benefits of IT, these same departments felt that many applications yielded disappointing results (Colton 1975). Implementation was slower than was expected, and disagreement was widespread about IT's usefulness for operations. Despite LEAA's \$50 million during the 1970s for technology assimilation, operational benefits—outside of dispatch and record reporting arenas—went largely unrealized. In law enforcement, by the close of the 1970s, IT was used primarily for recordkeeping, record searching, and record reporting.

In the 1970s, criminal justice managers were discovering what computers were and how they might assist operations. Although some adoption had occurred, for the most part it was a time of discovery and learning.

Exhibit 2. 1975 survey results of local government automation of law enforcement, corrections, and courts activities

	Cities		Counties		Total	
	#	%	#	%	#	%
Law enforcement activities						
Alias name files	65	16	4	1	69	10
Criminal offense files	112	28	48	15	160	22
Dispatching	65	16	19	6	84	12
Field interrogations	44	11	12	4	56	8
Fingerprint population	28	7	13	4	41	6
Intelligence compilation	21	5	6	2	27	4
Juvenile offense files	64	16	28	9	92	13
Modus operandi	47	12	10	3	57	8
Parking tickets	149	37	41	13	190	27
Stolen property	82	20	30	10	112	16
Stolen vehicles	88	22	33	11	121	17
Traffic accidents	131	33	32	10	163	23
Traffic violations	124	31	47	15	171	24
Uniform crime reporting	143	35	48	15	191	27
Correction activities						
Arrest records	120	30	47	15	167	23
Jail population	36	9	38	12	74	10
Court activities						
Child support records	9	2	71	23	80	11
Court calendars and scheduling	33	8	44	14	77	11
Court case disposition	28	7	30	10	58	8
Court disposition records	31	8	52	17	83	11
Court docketing	43	11	44	14	87	12
Detention records	14	3	23	7	37	5
Fines, collateral, and bail collections	32	8	44	14	76	11
Jury selection	28	7	105	34	133	19
Juvenile probation	12	3	25	8	37	5
Plaintiff/defendant records	20	5	45	15	65	9
Probation records	15	4	43	14	58	8
Wants and warrants	102	25	1	.3	103	14
Sources: Matthews, Dutton, and Kraemer 1976; Matthews et al. 1976.						

In the mid-1970s, correctional operations, which lacked financial capital for computerization, remained largely manual in nature. As shown in exhibit 2, the PPRO study revealed that no more than 15 percent of county correctional systems had automated arrest records and only 12 percent had automated jail population records. Although counties appeared slow to innovate, cities were making a bit more progress. Thirty percent of the cities had automated arrest records and 9 percent had automated jail population records. Overall, by 1975 only approximately 23 percent of local government agencies had computerized arrest records and only 10 percent had automated jail population records.

Although court systems demonstrated a higher level of computerization than did correctional departments, progress remained slow and uneven. According to Polansky (1996), by the early 1970s, many major urban courts had begun building court information systems. But there was little systems analysis and planning, and systems—designed and programmed by people who knew little about courts—never showed the results to justify high costs. Despite these difficulties, the first court-operated, computer-aided transcript system was installed in Allegheny County, Pennsylvania, in 1973. In the 1975 PPRO study, roughly 35 percent of courts automated jury selection, while court disposition records; court calendars and scheduling; court docketing; and fine, collateral, and bail collection remained primarily manual. As shown in exhibit 2, the most common IT applications among the courts were jury selection (19 percent), warrants (14 percent), and court docketing (12 percent). By the end of the decade, a nationwide survey conducted by NCSC indicated that approximately 500 courts were using data processing to some extent (Polansky 1996).

In summary, in the 1970s, criminal justice managers were discovering what computers were and how they might assist operations. Although some adoption had occurred, for the most part it was a time of discovery and learning. By the close of the decade, several major publications had been developed by major professional organizations to assist managers in computerizing operations. For example, NCSC published a series of reports, one titled *Guides for Court Managers*, and LEAA funded a report called *Computer Use in the Courts: Planning, Procurement, and Implementation Considerations*. In 1978, American University published *Criminal Courts Technical Assistance Project*. According to Colton (1979), in the 1970s, criminal justice managers were intimidated by and cautious of IT yet very interested in the potential benefits it might offer.

The criminal stream

During the 1960s and 1970s, networking and computer hardware and software had not advanced to the point where legislation concerning the perpetration of computer crimes was necessary. Most of the systems at that time were mainframes that were relatively closed to the public. Although computer crime more than likely took place, no Federal or State legislation existed in that area. IT crimes were prosecuted under penal codes that related to the particular offense, such as theft, embezzlement, or fraud. It was not until the technological changes of the 1980s that computer crime began to emerge as an important problem. Few anticipated the technological changes the next decade would bring and did not place much emphasis on the need to deter computer crime.

The civil stream

The growth of IT during the 1960s and 1970s sparked intense debate over the right to privacy versus the right to access information. By the late 1990s, the criminal justice arena would find itself in the difficult position of enforcing

Advances in IT would give rise to debates over encryption, promotion of commerce, protection of privacy, protection of public safety, and national security—issues affecting the daily operations of criminal justice agencies.

ambiguous privacy legislation and lobbying for international treaties on data security issues. The right to individual privacy has been a longstanding constitutional issue—the Fourth Amendment to the Constitution guarantees “the right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures.” The evolution of large databases and the associated technologies that promote collection, collation, and dissemination call into question the appropriate balance between individual privacy and rights of access.

The Freedom of Information Act (FOIA) became law in 1966. The Act established, for the first time, a presumption that records in the possession of executive-branch agencies and departments are accessible (Mason, Mason, and Culnan 1995). FOIA guarantees the right of people to know about the business of government. The Act requires government agencies to

reveal on demand many of their records and documents. Since 1966, FOIA has been amended a number of times, each time strengthening citizens’ access rights to government information.

The 1970s also brought a number of Federal enactments substantively affecting interpretations of data rights of individuals. The Fair Credit Reporting Act,

enacted in 1970, regulated how consumer credit reporting services could disclose personal information. The Act defined various legal terms about credit reporting, described permissible uses for credit reports, detailed consumers' rights in disputing credit reports, and established the enforcement responsibilities of the Federal Trade Commission (FTC) (Mason, Mason, and Culnan 1995, 246).

On the heels of the Fair Credit Act, the Federal Privacy Act of 1974 prohibited government agencies from using data for purposes other than those for which they were collected. In essence, it protects individual rights to privacy from government misuse of Federal records containing personal information. The Act requires agencies to collect and maintain only data relevant to their mission and forces agencies to account for every use of their information. A final piece of legislation of the 1970s, the Right to Financial Privacy Act of 1978, stipulated that personal financial records held by banks may not be released without a search warrant.

Interest group coalitions began to form during the 1970s, sparking debate over what information should be collected and disseminated and for what purposes. In the following years, this debate would influence where the criminal justice system balanced privacy rights against public access. Advances in IT would give rise to debates over encryption, promotion of commerce, protection of privacy, protection of public safety, and national security—issues affecting the daily operations of criminal justice agencies.

A Flurry of Activities—The 1980s

The operational stream

In the 1980s, the criminal justice system attempted to capitalize on the promises of IT. In 1980, Bill Gates developed the Microsoft Disk Operating System (MS DOS). MS DOS, coupled with the development of the 32-bit silicon chip, allowed IBM to introduce the first personal computer in 1981. During this same time, a Police Foundation survey reported that almost all law enforcement agencies serving areas with more than 1 million people had some sort of computerized searching capabilities (SEASKATE 1998). The study also suggested that procurement was a poor surrogate measure for use and institutionalization. Many departments had invested heavily in computers, but the investment had failed to produce comprehensive benefits in productivity and efficiency. In September 1982, *Police Magazine* asked, "Why is law enforcement not making more effective use of data processing?" This question has persisted, and in the ensuing 20 years, research has begun to reveal that factors such as organizational support, training, and culture affect benefit attainment.

By 1982, LEAA was abolished due to unrealistic expectations, wasteful use of funds, mounting red tape, and uncertain direction (SEASKATE 1998). Nonetheless, LEAA did contribute to bringing IT into the criminal justice system through programs like State Judicial Information Systems and Gavel-A National Model Trial Court Information System Project.

In 1984, IBM released the first 80286 processor, allowing more than 6 million operations per second, and NCSC hosted its first National Court Technology Conference in Chicago. By 1986, the U.S. Congress had created the State Justice Institute (SJI) to foster technology innovations in State and local courts.

During this same period, the International City Management Association released a followup survey of local governments similar to the one conducted by PPRO in 1975. The study examined all cities and counties with populations of 25,000 or more, and sampled 1 in 3 with populations between 10,000 and 25,000. Exhibit 3 shows the results from 1,032 jurisdictions. Results demonstrated substantial strides by local law agencies in their technology adoption rates. Roughly 40 percent had automated incident and accident reporting systems, 35 percent used computers for administrative tasks, and 17 percent had computer-aided dispatching. Nineteen percent used IT for scheduling purposes. In addition, 27 percent planned to adopt computerized dispatching systems, 24 percent had planned to automate incident and accident reports, and 23 percent had planned to incorporate computer technology into administrative tasks. By 1985, 90 percent of the 403 U.S. cities with populations of more than 50,000 were using IT in their criminal justice systems.

In 1976, roughly 20 percent of police officers surveyed suggested that investigative cases would be unworkable without IT. Just 12 years later, 80 percent of police officers claimed that without computerized information, cases would be unworkable (Northrop, Kraemer, and King 1995). Four out of five police officers indicated that computers made it easier to get information, that the information was often accurate, and that time-saving benefits were frequent. Clearly, according to this study, law enforcement agencies were benefiting greatly from IT. But, benefits notwithstanding, difficulties persisted. The systems most detectives and officers employed were cumbersome, particularly for collating leads and information from a variety of sources. Especially problematic were collaborations with other agencies. Systems incapable of permitting searches by external entities inhibited interagency efforts to capture offenders operating in a wide territory.

Correctional agencies continued to lag in their technology adoption efforts. Although nearly one-third of the agencies reported automated wants and warrants, only a small percentage (12 percent) reported automated jail management records.

Exhibit 3. Application software in local government criminal justice agencies in 1985 (N=1,032)

	#	
Law enforcement		
Incident/accident reports	433	42
Administration	358	35
Resource management/scheduling	196	19
Traffic accidents	433	42
Dispatching	171	17
Corrections		
Warrants	274	27
Jail management	124	12
Courts		
Wants and warrants	274	27
Jury selection	222	22
Fines, collateral, and bail collections	214	21
Court calendars and scheduling	161	16

Source: Adapted from Scoggins, Tidrick, and Auerback 1986.

About as many departments were planning for automation; 16 percent planned to automate wants and warrants, and 15 percent planned to adopt technology to assist with jail management.

For courts, the study revealed that roughly 20 percent applied computer technology to jury selection and to fines and fees collections. Approximately 15 percent applied computer technology to court scheduling and 10 percent to office administration. More local governments planned to incorporate technology in the courts: 14 percent had planned to automate court scheduling; 13 percent, fines and fees collections; 6 percent, jury selection; and 6 percent, the public attorney's office.

Because the 1975 and 1986 surveys overlapped in seven key areas—traffic accidents, dispatch, jail population, wants and warrants, court scheduling, jury selection, and fines collection—comparisons describe the growth over the decade. Automation of traffic accident reports saw the greatest gain from 23 to 42 percent. The second-fastest growth rate occurred in the wants and warrants area, which increased 13 percent. The remaining areas of dispatch, jail population, jury selection, court scheduling, and fines collection did not witness substantial growth.

Issues such as work process dependencies, computer code complexity, and questions about potential gains may have slowed automation in these areas.

By the mid-1980s, SJI had emerged as a major provider of technical assistance to State and local courts. Beginning in 1984, the NCSC's court technology conferences attracted thousands of professionals to witness successful technology projects (Polansky 1996). Furthermore, the agency launched the Forum on the Advancement of Court Technology in 1989 to facilitate dialogue between vendors and court managers on technology issues.

Unprecedented increases in computing power and capacity took place during the 1980s. Whereas in the early 1980s mainframe computers executing 200,000 transactions per second were the norm, by the end of the decade, Intel had released a microcomputer chip capable of executing more than 15 million operations per second. Moreover, the cost of computing power had dropped significantly while ease of use had increased. Thus, by the close of the 1980s, criminal justice agencies were more inclined to view technology as a feasible, reliable, and necessary support mechanism for operations.

The criminal stream

With the rise of personal computers and networking came the realization that IT provided new ways to commit crime. During this time, the U.S. Department of Justice (DOJ) defined computer crime as "any violations of criminal law that involve a knowledge of computer technology for their perpetration, investigation, or prosecution." Until 1984, no computer crime laws existed for prosecuting many of the infractions occurring. The Computer Fraud and Abuse Act of 1984 was the first legislative act focusing directly on computer crime. The Act established a felony offense for (1) accessing a computer without authorization; (2) obtaining information via unauthorized access from the financial records of a financial institution; (3) accessing a computer to use, destroy, modify, or disclose information found in a computer system; and (4) interfering with government operations on a computer.

Although the Act addressed some of the deficiencies in the law, criminal justice professionals complained it was too ambiguous and narrow in scope to provide adequate protection. With overwhelming bipartisan support, the Act was amended in 1986. The Computer Fraud and Abuse Act of 1986 expanded the 1984 legislation and made it a felony to commit computer fraud; to alter, damage, or destroy information contained in a "Federal interest computer"; to traffic in computer passwords; and to either conceal or possess counterfeit or unauthorized access devices. Despite the well-understood need for such legislation, figures on the extent of computer-related crime were not available.

The civil stream

Several laws passed during the 1980s sought to balance the rights of individual privacy versus rights to access information. The Electronic Communications Privacy Act of 1986 protected all forms of electronic transmissions from unauthorized interception. The Act also prohibited any person or entity from knowingly divulging the contents of any communication carried on a network service. It also allowed citizens to recover damages and bring civil suits if their wire, oral, or electronic communications were illegally intercepted. The Video Privacy Protection Act forbade retailers from releasing or selling video rental records without customer consent or a court order. Recognizing the ease with which records could be matched, thereby threatening privacy rights, the Computer Matching and Privacy Protection Act of 1988 was passed. The Act regulated the matching of Federal, State, and local records. It sought to ensure privacy, integrity, and verification of data for computer matching, and to establish data integrity boards within federal agencies. It required Federal agencies to enter into written agreements with other agencies or non-Federal entities before disclosing records for use in computer matching programs. The Act also mandated that individuals whose records are to be matched receive advance notification. In addition, it called for establishing procedures for retaining and destroying data after matching. The Data Integrity Board was empowered to oversee and coordinate the implementation of the Act and to prescribe procedures for verifying information produced through computer matching.

A Demand for Knowledge Support— The 1990s

The operational stream

More than 54 million computers were in use in the United States by 1990, and by 1991, Senator Al Gore's initiatives to establish a national data communication network—the information superhighway—were under way. In 1993, the White House launched its first Web page, and more than 90 percent of police departments serving populations of more than 50,000 were using computers for criminal investigation, budgeting, dispatch, and staff allocation (Reaves and Smith 1995).

A 1993 survey of 3,270 State and local law enforcement agencies with 100 or more full-time sworn officers—of which 661 responded—showed that the percent of large law enforcement agencies maintaining computerized files jumped from 39 to 55 percent in 3 years. The 1993 computer penetration rates in law enforcement appear in exhibit 4. From 1990 to 1993, the percent maintaining computerized traffic citation data rose from 30 to 46 percent, and computerization of calls for service from 30 to 45 percent (Reaves and Smith 1995). By 1993, among responding agencies, 97 percent had access to personal computers,

Exhibit 4. Law enforcement and management administration, computers and information systems, 1993 (N=661)

	#	%		#	%
Digital terminal, car mounted	214	32	Arrests	598	90
Handheld	71	11	Calls for service	576	87
Laptop	371	56	Criminal history	489	74
Mainframe	549	83	Driver's license information	291	44
Mini	358	54	Evidence	440	67
Personal	644	97	Fingerprints	247	37
Owns AFIS	81	12	Inventory	445	67
Shared AFIS	190	29	Payroll	476	72
Terminal access to AFIS	189	29	Personnel	550	83
Budgeting	546	83	Stolen property	485	73
Crime analysis	546	83	Stolen vehicles	473	72
Crime investigation	547	83	Summonses	252	38
Dispatch	541	82	Traffic accidents	467	71
Fleet management	385	58	Traffic citations	456	69
Jail management	202	31	UCR/NIBRS	271	41
Manpower allocation	386	58	UCR summary	494	75
Recordkeeping	623	94	Vehicle registration	316	48
Research	369	56	Warrants	502	76

Source: Reaves and Smith 1995.

83 percent had access to a mainframe computer, and 32 percent had access to car-mounted digital terminals. Ninety-four percent stated that they had automated their records and 83 percent said that they used technology to assist in crime investigations. Ninety percent had arrest histories automated and 87 percent kept calls-for-service histories. Many departments had also automated many business functions. Personnel and payroll records as well as stolen property and stolen vehicle records were largely automated. In short, by the early 1990s, computerization of routine transactions in law enforcement was largely complete.

In 1994, DOJ and the U.S. Department of Defense established a formal partnership to conduct joint research on a variety of technologies including information systems. Furthermore, the 1994 Crime Act passed Congress, leading to the establishment of the National Law Enforcement and Corrections Technology Center (NLECTC). NLECTC was established to help identify,

develop, manufacture, and adopt new products and technologies specifically designed for law enforcement and criminal justice applications. According to Attorney General Janet Reno, NLECTC was to be “part of a new law enforcement information network that will make it easier for law enforcement to find useful products and assist industry in identifying law enforcement requirements” (U.S. DOJ, NIJ 1994).

The Justice Information Network (JUSTNET) system was established in 1995 by NLECTC. JUSTNET serves as an online gateway to technology product and service providers as well as an information hub for services of interest to the law enforcement and correctional communities. Through JUSTNET, users have access to interactive bulletin boards on a variety of topics, a comprehensive database of law enforcement products and technologies, and NLECTC publications. In 1995, the Bureau of Justice Assistance (BJA) awarded a total of \$112 million to every State to improve criminal history information system technology.

By the mid-1990s, concern about underutilization of IT in corrections led to NIJ and the National Institute of Corrections (NIC) sponsoring several studies on the adoption rate of technology in corrections. A survey of 49 correctional institutions concluded, “Correctional officials were unanimous in describing management information systems as essential to their work. However, their biggest complaint was that their systems were under utilized” (Kichen, Murphy, and Levinson 1993, 7). The survey suggested that the underutilization resulted from poorly designed information systems and a lack of sufficient equipment and adequate training. Although IT had become an integral support mechanism in many daily operations (see exhibit 5), systems were not well managed, negating many potential benefits.

A second correctional survey released in 1995 (U.S. DOJ, NIC 1995) examined 148 Federal, State, and local corrections agencies; these consisted of 48 State and Federal adult prisons, 44 large jails and jail systems, and 56 community correctional agencies. By this time, IT was in use in numerous corrections operations. Approximately 80 percent of adult facilities, nearly 70 percent of community corrections agencies, and approximately 60 percent of large jails had access to a local area network with electronic mail capability. The majority of the facilities also had access to NCIC and local or State online offender information (see exhibit 6). Interestingly, even though the vast majority of the facilities were satisfied with their technology, negative comments such as “minimally adequate,” “slow,” and “cumbersome” surfaced.

A third survey of State and Federal correctional information systems, released in 1998 (U.S. DOJ 1998), focused not on hardware access but rather on the extent to which electronic data were available to support correctional operations

Exhibit 5. Computer adoption in corrections, 1993 (N=49)

	#	%		#	%
Offender case management			In program data		
Admissions/releases	44	96	Good time	37	80
Parole	40	87	Disciplinary reports	29	63
Classification	36	78	Grievance	18	39
Inmate activities			Accounting*		
Work assignment	35	76	Payroll	39	85
Education	33	72	Accounts payable	36	78
Movement control	29	63	Purchasing	33	72
Offender history			Personnel*		
Prior record tracking	37	80	Leave status	35	76
Detainers	35	76	Training	32	70
Medical/mental health records	20	43	Staff scheduling	23	50

* Administrative/facilities support.

Source: Adapted from Kichen, Murphy, and Levinson 1993.

in all 50 State-level institutions. Respondents identified the data collected and maintained in electronic format and data availability for computation. The survey asked if State correctional departments maintained a database of 207 specific items deemed critical by the researchers. The data categories included offender profiles, behaviors, and release information. It turned out that no department collected all of the data elements. Collection rates ranged from 16 to 85 percent, and 32 departments captured at least 50 percent of the critical data elements. Only 40 departments maintained data on offender behavior and only 38 maintained data on crimes committed by offenders under some form of supervision. Unfortunately, the study failed to evaluate data quality.

In contrast to correctional experiences, by the 1990s, virtually no court, no matter how small, had not embarked on an IT project to improve services and reduce costs (Polansky 1996). NCSC established the Technology Information Exchange Service (TIES). TIES, in turn, initiated programs to assist with IT innovation, including the Court Technology Laboratory and the Technology Information Service (TIS). TIS issued more than 2,000 information packets to

Exhibit 6. Information systems in corrections, 1995

Adult prison systems (N=48)		
Computer local area network (LAN) with e-mail capability	37	77
Computer wide area network (WAN) with e-mail capability	24	50
Federal online offender information system (NCIC)	34	71
Local or State government information system (not for offender data)	19	40
Local or State online offender information system	34	71
Large jails/jail systems (N=44)		
Computer local area network (LAN) with e-mail capability	25	57
Computer wide area network (WAN) with e-mail capability	13	30
Federal online offender information system (NCIC)	42	95
Local or State government information system (not for offender data)	19	43
Local or State online offender information system	42	95
Community-based corrections (N=56)		
Computer local area network (LAN) with e-mail capability	38	68
Computer wide area network (WAN) with e-mail capability	26	46
Federal online offender information system (NCIC)	40	71
Local or State government information system (not for offender data)	24	43
Local or State online offender information system	50	89
Source: Adapted from the U.S. Department of Justice, National Institute of Corrections 1995.		

interested court personnel on issues such as case management systems, imaging, video technology, and judicial electronic document and data interchange. In the early 1990s, the TIS program fielded more than 1,000 requests annually from court agencies on IT adoption. By 1995, the annual rate of requests had doubled (Walker 1996). In the early 1990s, the Court Technology Laboratory opened; its mission was to investigate the feasibility of alternative technologies in courts.

In 1993, the College of William and Mary unveiled Courtroom 21, "the courtroom of the 21st century today." It was heralded as the most technologically advanced trial and appellate courtroom in the world. With the goal of improving the timeliness of court trials while keeping costs low, the high-tech courtroom was designed to test the impact of employing state-of-the-art technology in court hearings. Some capabilities of the courtroom included instant access to LEXIS and FolioViews, real-time stenograph transcription (immediate transcription benefits

During the earlier stages of IT adoption, managers hoped to speed processing and streamline manual work processes. They focused largely on transactions such as traffic tickets, dispatch, and payroll. Over the years, however, improvements in hardware and software allowed organizations to use IT not only to support transactions, but also to provide information-generating knowledge.

the hearing impaired and permits reviewing testimony), two-way live audio-video for witness testimony, video-taping of proceedings, consecutive translation of up to 143 languages, and animated presentations and monitor display of evidentiary items (Lederer 1997). In April 1997, the William and Mary Law School conducted an experimental jury trial to assess the facilities. The visual presentation of evidence resulted in substantial time savings in witness examinations (Lederer and Solomon 1997).

By 1994, roughly 83 percent of all prosecutors' offices used IT for office management, individual criminal matters, and case management (DeFrances, Smith, and van der Does 1996). Popular topics included electronic filing (including digital signatures), courtroom automation, video technologies, imaging, and court reporting technologies. The researchers sampled 308 chief prosecutors from the estimated 2,350 that try felony cases (see exhibit 7). The study also found that many offices experienced data-related problems. Poor data quality may have resulted from data coding limitations and/or a lack of quality assurance procedures. Eighty-five percent of offices reported problems with accessible data quality, including incomplete information on adult criminal records. Close to 60 percent cited problems with data accuracy and roughly 40 percent reported timeliness problems.

The NCIC system had also been upgraded to include single prints of wanted persons by the 1990s. As mentioned earlier, at its inception in 1964, 15 agencies used the system and executed roughly 6,580 transactions per day. By the 1990s, more than 79,000 agencies accessed the system, executing approximately 1.5 million transactions per day.

Technical advances in computing processing, storage, and communications stimulated hope for service delivery improvements among criminal justice managers. During the earlier stages of IT adoption, managers hoped to speed processing and streamline manual work processes. They focused largely on transactions such as traffic tickets, dispatch, and payroll. Over the years, however, improvements in hardware and software allowed organizations to use IT not only to support transactions, but also to provide information-generating knowledge. By using that

Exhibit 7. Computer use among prosecutors, 1996

Office management	
Caseload statistics	60
Budgeting	46
Expenditures	38
Employment records	17
Information on individual criminal matters	
Adult criminal history records	48
Processing/outcome evidence about cases	41
Arrest of individuals	36
Juvenile delinquency history records	25
Case management by attorneys	
Form or letter preparation	82
Prewritten motions	71
Jury instructions	65
Court dates	55
Subpoenas	55
Discovery requests	51
Witnesses	50
Physical evidence	16
Source: DeFrances and Steadman 1998.	

knowledge effectively, managers can improve the quality of service delivery. It was during the 1990s that scholars and practitioners alike began to focus on ways knowledge workers might strengthen organizations. As advances were made, practitioners expected technology to support knowledge and demanded that staff become information literate and knowledge oriented.

The shift in requirements from transactions to knowledge became apparent in many fields, and these expectations have dominated criminal justice bureaucracies. The interdependencies of the criminal justice agencies as well as the potential crime-reducing benefits from sharing and integrating data and knowledge have probably promoted a more holistic approach to information collection and analysis.

The critical need for criminal justice agencies to exchange and integrate data resulted in Congress' passing the 1997 Crime Identification Technology Act

(Public Law 105–251). It made more than \$1.25 billion available for developing integrated justice systems. The Act called for (1) upgrading criminal history and criminal justice record systems, including systems operated by law enforcement agencies and courts; (2) improving criminal justice identification; and (3) promoting compatibility and integration of national, State, and local systems for criminal justice purposes.

Although many jurisdictions have sought integrated systems, technological and organizational hurdles have proven difficult to overcome. Organizational issues related to collaboration, training, and funding; shortages in technical personnel; and security concerns have thwarted efforts. Nonetheless, by the late 1990s, more than a dozen States were in the process of either developing or implementing plans to allow interagency data exchange and integration. These collaborative efforts took many forms and often involved a diverse set of actors. But the goals were fairly similar: to allow all components of the criminal justice community to share comprehensive case management, incident, and investigative data across organizational boundaries.

The criminal stream

In 1991, DOJ established the Computer Crime Unit (CCU) within the Criminal Division. CCU was given responsibility for prosecuting computer crimes, lobbying for strengthened penalties for computer crime, and encouraging expansion of the Federal computer crime statute. Despite CCU's many responsibilities, the absence of a comprehensive legal framework for computer crime encouraged it to focus more on lobbying than on prosecutorial functions. CCU lobbying goals included (1) focusing on unauthorized use rather than unauthorized access of computer systems (in the legal sense, *use* was broadly defined to include indirect and direct access, whereas *access* was defined by direct access only); (2) criminalizing malicious programming (or the insertion of such programs); (3) legislating the forfeiture of computers used in the commission of crimes; and (4) enacting stricter sentences.

In 1994, the Computer Abuse Amendments Act was expanded to address the transmission of viruses and other harmful code. The Act made it illegal to knowingly transmit a computer program (such as a virus, time-bomb, or worm) that causes damage. And in 1996, the Act was amended, making it illegal to intentionally access a protected computer or cause either reckless damage or a denial of service.

Thus, by the end of the 1990s, Federal computer crime legislation covered (1) interstate and foreign communications; (2) theft or compromise of national defense, foreign relations, atomic energy, or other restricted information; and (3) the intentional transmission of damaging programs. Moreover, legislation

prohibited unauthorized access of U.S. Government and most financial institutions' computers. Federal legislation also addressed the unauthorized access of computers in other States or countries. In addition to the State and Federal enactments, every State except Vermont had passed some form of computer crime regulation. Despite the many differences among the statutes of the 49 States, State legislation addressed 6 common categories:

- **Intellectual property**—expanded the idea that computer programs, computer data, and computer services are property or intellectual property.
- **Computer tampering**—made illegal “knowingly or recklessly” degrading or disrupting computer services to the extent that such actions impair the ability of authorized users to obtain full use of their computer system.
- **Computer trespass**—made illegal the unauthorized access of a computer and its contents including using the contents of a computer to aid and abet the commission of a crime.
- **Unlawful duplication/disclosure**—made illegal copying and distributing the contents of a computer without authorization.
- **Defenses**—allowed some defenses to restrict unauthorized access.
- **Venues/sites of offense**—specified the jurisdiction for purposes of prosecuting the theft of computer information.

Eighty-six percent of the States had addressed computer tampering and computer trespass. By 1999, 43 States had passed some form of regulation pertaining to computer tampering and trespass. The next most frequently cited legislative area pertained to the expanded property concept. Sixty-two percent (31 States) had passed legislation extending the property concept to computer technology. Less commonly addressed in the State legislation were unlawful duplication (20 States), jurisdiction of offense issues (16 States), and defenses against unauthorized access (6 States).

By the late 1990s, more than 100 million people had access to data networks, and the U.S. financial industry transmitted trillions of dollars of transactions every day over computer networks. The Computer Emergency and Response Team at Carnegie Mellon University found a 498-percent increase in computer crime between 1991 and 1994. In 1994 alone, 40,000 Internet computers were attacked in 2,460 separate incidents.

By the late 1990s, more than 100 million people had access to data networks, and the U.S. financial industry transmitted trillions of dollars of transactions every day over computer networks. The Computer Emergency and Response Team at Carnegie Mellon University found a 498-percent increase in computer crime between 1991 and 1994. In 1994 alone, 40,000 Internet computers were attacked in 2,460 separate incidents. Yet, according to Attorney General Janet Reno, computer crime has not received the emphasis that other forms of crime have earned (Reno 1997a).

Computers and crime interrelate in three distinct manners: a computer may be the object, subject, or instrument of a crime (Icove, Seger, and VonStorch 1995). First, as objects of crime, processor time, services, hardware, software, or information are often common targets for theft. Second, computers can also be the subject of a crime when the goal is to disable. For example, the transmission of harmful code such as viruses or logic bombs can destroy vital computer data and programs. Finally, computers may be instruments for conducting crimes such as fraud, embezzlement, and child pornography. By the late 1990s, the most common crimes conducted online were network break-ins, espionage, theft (of software, data, or passwords for impersonation), embezzlement, child pornography, and sabotage.

The civil stream

With the 1990s came widespread recognition that information in and of itself was a commodity that could be bought, sold, or bartered. According to Branscomb (1994), information dynamics changed from being an instrument through which we acquire and manage other assets to being a primary asset itself. With information becoming a commodity in and of itself, many called for further elaboration on protection and definition of ownership rights. The increased speed and accuracy of computer data collection and analysis routines also increased the value of information previously seen as unusable. But even as social debates showed the boundaries between public and private information, they were not clearly delineated.

On one hand, companies were encouraged to increase profits by selling data and restricting access. On the other hand, public demand for free access pushed individuals and companies to maximize data access and minimize data restrictions. As a natural consequence of these contradictory pressures, the 1990s saw the beginning of a host of novel questions. While the debate raged, criminal justice agencies wrestled with ambiguous computer and data security issues. The only major legislative act addressing the privacy-access debate was passed in 1997. The No Electronic Theft (NET) Act closed a loophole in the law that allowed people to give away copyrighted material (such as software and data) without legal repercussions.

The civil stream of the 1990s was dominated by debate. Several major pieces of legislation were introduced, but none passed. The underlying philosophical issues spurred debate, speculation, and uncertainty. At the same time, sophisticated computer procedures were evolving. These promoted the economic value of information by establishing sophisticated data-matching techniques and impenetrable data channels. Economic incentives led to complex computer encryption techniques for stopping unauthorized access. The ability to restrict access severely limited criminal justice efforts to identify, deter, and prosecute computer crime.

In sum, operationally, by the close of the 1990s, criminal justice agencies expected much from technological innovations. It was no longer enough to automate simple transactions such as payroll, dispatch, and crime reporting. Many agencies looked to technology to enhance knowledge by providing access to a wealth of previously untapped information. Mapping systems, hot-spot analysis, and object-oriented technologies dominated the decade as researchers sought to define technology solutions capable of enhancing knowledge. If technology was to truly serve the needs of the criminal justice system, then technology had to facilitate the accretion of knowledge that could translate into improved performance and service delivery.

At the same time, criminal and civil issues dominated the IT landscape. The use of technology to perpetrate crimes skyrocketed, but only one-tenth of all computer crimes were reported. The FBI estimated that between 85 and 97 percent of computer intrusions went undetected (Icove, Seger, and VonStorch 1995). The ongoing debate about public rights to access information versus proprietary interests restricting those data offered little to criminal justice professionals in their attempts to protect and serve.

In 1993, recognizing the computer-related difficulties facing the criminal justice community, Vice President Al Gore established the Government Information Technology Services Board. He challenged the Board to establish goals addressing the information technology needs of the criminal justice community. The board identified the following goals: to define the criminal justice community's information requirements, to test the core requirements, to establish a joint Government-private sector Criminal Justice Information Advisory Group, and, by June 1998, to prepare a global criminal justice information network. The Crime Identification Technology Act of 1998 (PL 105-251) provided roughly \$1.25 billion for integrated system development efforts to achieve these goals. The following section examines several major challenges that confront the criminal justice system as it enters the new millennium.

IT Challenges Confronting the New Millennium

The criminal justice arena turned to IT to leverage many of the benefits that technology promised. The credo of being able to access “any thing, any time, any place” offered the opportunity to gain significant operational benefits. Yet, with the promise of the technology revolution came unexpected hurdles and challenges. In the last two decades of the 20th century, criminal justice agencies experienced substantial turmoil as the information age gained momentum and they struggled to adapt. The use of technology to improve operations, new mechanisms for crime perpetration, and civil issues pertaining to protection of both privacy and access all stimulated major changes in the criminal justice system.

Sustaining the changes associated with IT innovation has proven difficult for many organizations. The true cost in technological adoption is in the ongoing maintenance that technology demands.

Complex training requirements, ongoing funding needs, and system staffing shortages have thwarted many well-intended efforts.

The speed at which IT grew proved particularly challenging to the criminal justice system because few anticipated the speed of these developments and the scope of their impact on criminal justice. Since many of these challenges were unexpected, agencies scrambled to chart new policies and programs with minimal lead time. Although many predicted significant benefits, few understood the corollary costs and disadvantages the criminal justice field would be forced to assume. The discussion below focuses on some of the major IT challenges deriving from the operational, criminal, and civil domains of the criminal justice system. The challenges confronting the criminal justice field fall in the areas of (1) enhancing collaboration and knowledge; (2) sustaining IT change;

(3) deterring, investigating, and prosecuting computer crime in a global market; and (4) mediating the privacy-access debate.

Enhancing collaboration and knowledge

The first challenge focuses on collaborating to capture and promote knowledge among staff and officers. In the past, IT equated to automating manual procedures and spewing data—much of which had little relevance to the officer in the field. The link between data and knowledge appeared evasive and fleeting. Although data were cataloged, searched, and analyzed, frustrations grew. Criminal justice professionals complained about the lack of timely, complete,

accessible, and accurate data. The need to enhance knowledge by sharing critical data, documents, images, and key transactions among agencies dominated discussions.

Establishing effective partnerships and overcoming the fears associated with information sharing remain challenging. Traditionally, the criminal justice culture has discouraged information sharing, often for good reason. Exposure could compromise an investigation or jeopardize life or property. Developing partnerships and establishing what information can and should be shared does not come easily. Figuring out how to reward data sharing while maintaining security and accountability continues to challenge the criminal justice field as it looks to technology to advance knowledge.

Sustaining IT change

Sustaining the changes associated with IT innovation has proven difficult for many organizations. The true cost in technological adoption is in the ongoing maintenance that technology demands. Complex training requirements, ongoing funding needs, and system staffing shortages have thwarted many well-intended efforts. Although grant opportunities provided funds for system startup, operational budgets have often failed to provide the requisite ongoing support. Ensuring that electronic-based data are maintained in a reliable, documented, and replicable fashion, with a chain of custody, demands procedures for data collection, retention, and distribution. One of the greatest challenges facing any organization is the extent to which it is capable of assimilating the changes that technology brings. Technology often forces changes in work processes and procedures, in training and support, and in policies and communications. It can be a challenge to weather and assimilate the changes while avoiding a detrimental setback in services. Given the rate of IT growth, the procedures and methods for sustaining IT-driven innovations demand constant attention.

Deterring, investigating, and prosecuting computer crime in a global market

The third challenge confronting the criminal justice system is how to deter, investigate, and prosecute crime related to IT in a global marketplace. Computer crime can penetrate political boundaries and override legislative policies with ease. The dimension of the problem was best articulated by Attorney General Reno when she stated that, via computer crime, “You can sit in a kitchen in St. Petersburg, Russia, and steal from a bank in New York” (1997a). As a consequence, controlling computer crime requires

sophisticated international treaties. In her desire to address the global vulnerabilities that make deterrence, investigation, and prosecution difficult, Reno proposed an agreement among the P8 countries to combat computer crime. As shown in exhibit 8, the agreement calls for the international criminal justice community to institutionalize 10 major principles for combating computer crime. The extent to which international support can be elicited and maintained will have a significant bearing on the criminal justice system's ability to arrest computer crime.

Exhibit 8. International principles for combating computer crime

1. **There must be no safe havens for those who abuse information technologies.**
2. Investigation and prosecution of international high-technology crimes must be coordinated among all concerned states, regardless of where harm has occurred.
3. **Law enforcement personnel must be trained and equipped to address high-technology crimes.**
4. Legal systems must protect the confidentiality, integrity, and availability of data and systems from unauthorized impairment and ensure that serious abuse is penalized.
5. **Legal systems should permit the preservation of, and quick access to, electronic data that are often critical to the successful investigation of crime.**
6. Mutual assistance regimes must ensure the timely gathering and exchange of evidence in cases involving international high-technology crime.
7. **Transborder electronic access by law enforcement to publicly available (open source) information does not require authorization from the state where the data resides.**
8. Forensic standards for retrieving and authenticating electronic data for use in criminal investigations and prosecutions must be developed and employed.
9. **To the extent practical, information and telecommunications systems should be designed to help prevent and detect network abuse, and should also facilitate the tracing of criminals and the collection of evidence.**
10. Work in this area should be coordinated with the work of other relevant international agencies to ensure against duplication of efforts.

Source: Reno 1997a.

Mediating the privacy-access debate

The fourth challenge facing criminal justice involves the privacy-access debate. The definition used to determine whether information is public or private is in constant flux (Branscomb 1994; Icove, Seger, and VonStorch 1995; Reno 1997b). Moreover, they suggest that it will continue to be a moving target until we agree on which ethical values to impose and which guiding principles to follow (Branscomb 1994, 176).

The use of encryption techniques sits at the center of this debate. These computer capabilities thwart the ability to deter, investigate, and prosecute crime. According to Reno, encryption techniques can make it impossible for law enforcement agencies to lawfully overhear criminal telephone conversations or gain access to electronically stored evidence (1997b). She argues that encryption techniques can seriously jeopardize public safety and national security. She calls for a balanced approach supporting both commercial and privacy interests but also maintaining the ability to investigate and prosecute serious crime. Recognizing that encryption is critical to security, privacy, and commercial interests, Reno calls for a “key” approach to safeguarding information where computer devices incorporate a virtual “lock and key” mechanism. A viable key management infrastructure would promote electronic commerce and enjoy the confidence of encryption users. She also recommended a key management infrastructure permitting law enforcement to obtain court-ordered access, criminalizing the improper use of encryption key recovery information and the use of encryption for criminal purposes, and allowing the Federal Government use of key recovery encryption that is inoperable within the private sector.

The debate between privacy and commercial interests will continue to rage until an effective compromise can be reached among the various interest groups. Unfortunately, as identified by Branscomb, the criminal justice field will continue to wrestle with a legal infrastructure that can best be described as “an impenetrable and irrational thicket of sometimes irrelevant and often unenforceable laws” (1994, 180).

According to Reno, encryption techniques can make it impossible for law enforcement agencies to lawfully overhear criminal telephone conversations or gain access to electronically stored evidence.

She argues that encryption techniques can seriously jeopardize public safety and national security. She calls for a balanced approach supporting both commercial and privacy interests but also maintaining the ability to investigate and prosecute serious crime.

In sum, the past two decades brought the criminal justice system both opportunities and challenges. IT was heralded throughout the business society as a tool for improving operations and stimulating effectiveness and productivity. At the same time, IT also became a critical economic support structure as well as a mechanism for perpetrating crime. In the future, the ways in which international society both employs and controls technology in a global context will have an enormous impact on the criminal justice field and its ability to contain crime and protect domestic safety.

References

- Agranoff, Michael. 1991. Controlling the threat to personal privacy. *Journal of Information Systems Management* 8 (3) (Summer): 38–42.
- Anthes, G. 1996. IRS project failures cost taxpayers \$50 billion annually. *Computerworld* 30 (42): 1–30.
- Boettinger, H.M. 1984. Information industry challenges to management and economics. *New Jersey Bell Journal* 7 (1) (Spring): 12–21.
- Bowsher, C.A. 1994. Preface to *Executive guide: Improving mission performance through strategic information management and technology: Learning from leading organizations*. Doc. no. GAO/AIMD–94–115. Washington, D.C.: U.S. General Accounting Office.
- Boynton, A., G. Jacobs, and R. Zmud. 1992. Whose responsibility is IT management? *Sloan Management Review* (Summer): 32–38.
- Branscomb, Anne Wells. 1994. *Who owns information?* New York: Basic Books.
- . 1990. Rogue computer programs and computer rogues: Tailoring the punishment to fit the crime. *Rutgers Computer and Technology Law Journal* 16 (1) (1990): 32–36.
- Brown, Mary M., and J.L. Brudney. 1998. A “smarter, better, faster, and cheaper” government? Contracting for Geographic Information Systems. *Public Administration Review* 58 (4): 335–345.
- Cats-Baril, W.L., and R.L. Thompson. 1996. *Information technology and management*. New York: Irwin.
- Caudle, S.L., D.A. Marchand, S.I. Bretschneider, P.T. Fletcher, and K.M. Thurmaier. 1989. *Managing information resources: New directions in State government*. Syracuse, New York: Syracuse University.
- Ciongoli, A.G., J.A. DeMarrais, and J. Wehner. 1994. Computer-related crimes. *American Criminal Law Review* 31(2): 425–453.

- Cleveland, Harlan. 1989. *The knowledge executive: Leadership in an information society*. New York: Dutton.
- Colton, Kent W. 1979. *Police and computer technology: A decade of experience since the Crime Commission—Summary*. Grant no. 76–NI–99–0043, NCJ 60551. U.S. Department of Justice, Law Enforcement Assistance Administration.
- . 1975. Computers and the police: Police departments and the new information technology. *The Municipal Year Book 1975*. Washington, D.C.: International City Management Association.
- Colton, Kent, Margaret Brandeau, and James Tien. 1983. *A national assessment of police command, control, and communications systems*. Grant no. 78–NI–AX–0144, NCJ 87679. U.S. Department of Justice, National Institute of Justice.
- Davenport, Thomas. 1993. *Process innovation: Reengineering work through information technology*. Boston: Harvard Business School Press.
- Davenport, T.H., R.G. Eccles, and L. Prusak. 1992. Information politics. *Sloan Management Review* (Fall): 53–65.
- Davis, G.B., A.L. Lee, K.R. Nickles, S. Chatterjee, R. Hartung, and Y. Wu. 1992. SOS: Diagnosis of an information system failure. *Information and Management* 23: 293–318.
- Dawes, S., K. Kelly, D. Andersen, P. Bloniarz, A. Cresswell, and T. Galvin. 1996. *Making smart IT choices: A handbook*. Albany, New York: Center for Technology in Government.
- DeFrances, C.J., and G.W. Steadman. 1998. *Prosecutors in State courts, 1996*. Bulletin, NCJ 170092. U.S. Department of Justice, Bureau of Justice Statistics.
- DeFrances, C.J., S. Smith, and L. van der Does. 1996. *Prosecutors in State courts, 1994*. Bulletin, NCJ 151656. Washington, D.C.: U.S. Department of Justice, Bureau of Justice Statistics.
- DeSeve, E., A.M. Pesachowitz, and L.K. Johnson. 1997. *Best IT practices in the Federal Government*. Report published by the Chief Information Officers Council and the Industry Advisory Council. Washington, D.C.: Chief Information Officers Council.
- Drucker, Peter. 1995. *Managing in a time of great change*. New York: Truman Talley Books/Dutton.
- . 1990. *The new realities*. New York: Harper & Row.
- . 1969. *The age of discontinuity: Guidelines to our changing society*. New York: Harper & Row.
- Feldman, M.S., and J.G. March. 1981. Information in organizations as signal and symbol. *Administrative Science Quarterly* 26 (2): 173.

- Fletcher, P., S. Bretschneider, D. Marchand, H. Rosenbaum, and J.C. Bertot. 1992. *Managing information: The county study*. Syracuse, New York: Syracuse University.
- Flowers, Stephen. 1996. *Software failure: Management failure: Amazing stories and cautionary tales*. New York: John Wiley & Sons.
- G2 Research. 1997. Public sector forecasts. Retrieved June 1998 from the World Wide Web: <http://206.184.213.145/slg/slg1.htm>.
- Gallagher, B.P., C.J. Alberts, and R.E. Barbour. 1997. *Software acquisition risk management key process area*. Doc. no. CMU/SEI-97-HB-002. Pittsburgh: Carnegie Mellon University, Software Engineering Institute.
- Geller, William. 1997. Suppose we were really serious about police departments becoming "learning organizations"? *National of Institute Justice Journal* 234 (December): 2-8.
- Goldstein, Herman. 1990. *Problem-oriented policing*. New York: McGraw-Hill.
- Gurwitt, R., 1996. The new data czars. *Governing* (December): 52-56.
- Hammitt, Harry. 1998a. Constitutional right of informational privacy. *Government Technology* (June): 22.
- . 1998b. Privacy marches on. Retrieved 16 February 2000 from the World Wide Web: <http://www.govtech.net/publications/gt/1998/July/access/access.shtm>.
- . 1998c. Privacy versus access tug of war. *Government Technology* (February): 28-29.
- Higuera, R.P., A.J. Dorofee, J.A. Walker, and R.C. Williams. 1994. *Team risk management: A new model for customer supplier relationships*. Doc. no. CMU/SEI-94-SR-005. Pittsburgh: Carnegie Mellon University, Software Engineering Institute.
- IBM Corporation. Assuring access for all and protecting privacy and security. Living in the Information Society Series. Retrieved 11 January 2000 from the World Wide Web: <http://www.ibm.com/ibm/publicaffairs>.
- Icove, D., K. Seger, and W. VonStorch. 1995. *Computer crime: A crimefighter's handbook*. Sebastopol, California: O'Reilly and Associates.
- Johnson, E.C. 1998. Court automation and integration: Issues and technologies. *SEARCH Technical Bulletin*.
- Johnson, Jeffrey R., and John A. Ford. 1999. The challenge for global electronic commerce: Building trust on a solid foundation of security and privacy. Retrieved 27 January 2000 from the World Wide Web: <http://www.equifaxsecure.com/pdfs/whitepaper.pdf>.

- Kalbfleisch, J.D., and R.L. Prentice. 1980. *The statistical analysis of failure time data*. New York: John Wiley & Sons.
- Kavanaugh, J. 1997a. Child support system in trouble. *Government Technology* 10 (7): 8.
- . 1997b. LAPD technology office proposed. *Government Technology* 10 (3): 10.
- Keen, Peter. 1991. *Shaping the future*. Boston: Harvard Business School Press.
- . 1986. *Competing in time*. Cambridge, Massachusetts: Ballinger.
- Keider, S.P. 1984. Why system development projects fail. *Journal of Information Systems Management* 1 (3): 33–38.
- Keil, M. 1995. Pulling the plug: Software project management and the problem of escalation. *MIS Quarterly* (December): 421–447.
- Kerzner, H. 1998. *Project management: A systems approach to planning, scheduling, and controlling*. New York: Van Nostrand Reinhold.
- Kichen, C., J. Murphy, and R.B. Levinson. 1993. Correctional technology: A user's guide. Grant no. 91P07GHM9, NCJ 149015. Washington, D.C.: U.S. Department of Justice, National Institute of Corrections.
- Lacity, M.C., L.P. Willcocks, and D.F. Feeny. 1996. The value of selective IT sourcing. *Sloan Management Review* 37 (3): 13–25.
- Laudon, Kenneth, and Jane Laudon. 1996. *Management information systems*. Upper Saddle River, New Jersey: Prentice Hall.
- Lederer, A.L., and V. Sethi. 1996. Key prescriptions for strategic information systems planning. *Journal of Management Information Systems* 13 (1): 35–62.
- Lederer, F.I. 1997. An introduction to technologically augmented litigation. Retrieved 14 January 2000 from the World Wide Web: <http://courtroom21.net/auglit.html>.
- Lederer, F.I., and S.H. Solomon. 1997. Courtroom technology—An introduction to the onrushing future. Article submitted for the Fifth National Court Technology Conference (CTC5), National Center for State Courts. Retrieved 13 January 2000 from the World Wide Web: www.ncsc.dni.us/ncsc/tis/ctc5/103.htm.
- LIS, Inc. 1995. Technology issues in corrections agencies: Results of a 1995 survey. Report submitted to the National Institute of Corrections, Washington, D.C.
- Lively, G.M. 1996. Thinking globally to act locally: NIJ improves worldwide access to criminal justice information. *National Institute of Justice Journal* 230: 2–8.
- Loundy, D. 1998. E-LAW 4: Computer information systems law and system operator liability. *Seattle University Law Review* 21 (4).

- Lucas, H.C., Jr. 1975. *Why information systems fail*. New York: Columbia University Press.
- Maltz, M. 1984. *Recidivism*. Orlando, Florida: Academic Press.
- Mamalian, C., and N. La Vigne. 1999. *The use of computerized crime mapping by law enforcement: Survey results*. Research Preview, FS 000237. Washington, D.C.: U.S. Department of Justice, National Institute of Justice.
- Martin, James. 1995. *The great transition*. New York: American Management Association.
- Mason, R.O., F.M. Mason, and M.J. Culnan. 1995. *Ethics of information management*. Thousand Oaks, California: Sage Publications.
- Matthews, J.R., W.H. Dutton, and K. Kraemer. 1976. *The County Information Systems directory 1975*. Irvine: University of California, Public Policy Research Organization.
- Matthews, J.R., K. Kraemer, L. Hackathorn, and W.H. Dutton. 1976. *The Municipal Information Systems directory 1975*. Irvine: University of California, Public Policy Research Organization.
- McFarlan, F.W., and R.L. Nolan. 1995. How to manage an IT outsource alliance. *Sloan Management Review* 36 (2): 9–23.
- McLeod, Graham, and Derek Smith. 1996. *Managing information technology projects*. Danvers, Massachusetts: Boyd & Fraser Publishing Company.
- Mechling, J., and T. Fletcher. 1996. *Information technology and government: The need for new leadership*. Cambridge: Harvard University Press.
- National Information Infrastructure Task Force. 1997. Options for promoting privacy on the national information infrastructure. Retrieved 12 January 2000 from the World Wide Web: <http://www.iitf.nist.gov/ipc/privacy.htm>.
- Northrop, A., K. L. Kraemer, and J. L. King. 1995. Police use of computers. *Journal of Criminal Justice* 23 (3): 259–275.
- Northrop, A., K.L. Kraemer, D. Dunkle, and J.L. King. 1990. Payoffs from computerization: Lessons over time. *Public Administration Review* 50 (5): 505–514.
- Polansky, Larry. 1996. The long and winding road. *Court Technology Bulletin* 8:2.
- Information Infrastructure Task Force. 1995. Privacy and the national information infrastructure: Principles for providing and using personal information. Retrieved 12 January 2000 from the World Wide Web: http://www.iitf.nist.gov/ipc/ipc/ipc-pubs/niiprivprin_final.html.

Quinn, J.B., and F.G. Hilmer. 1994. Strategic outsourcing. *Sloan Management Review* 37 (4): 43–55.

Reaves, B., and P. Smith. 1995. *Law enforcement management and administrative statistics, 1993: Data for individual State and local agencies with 100 or more officers*. NCJ 148825. U.S. Department of Justice, Bureau of Justice Statistics.

Regan, E.A., and B.N. O'Connor. 1994. *End-user information systems*. New York: Macmillan.

Reno, Janet. 1997a. Keynote address by U.S. Attorney General Janet Reno on high tech and computer crime. Presented at the Meeting of the P8 Senior Experts' Group on Transnational Organized Crime, 21 January, Chantilly, Virginia. Retrieved 12 January 2000 from the World Wide Web: <http://www.usdoj.gov/criminal/cybercrime/agfranc.htm>.

———. 1997b. Letter to members of Congress regarding law enforcement's concerns related to encryption, 18 July. Retrieved 12 January 2000 from the World Wide Web: <http://www.usdoj.gov/criminal/cybercrime/crypto.html#IVc>.

Rich, T.F. 1995. *The use of computerized mapping in crime control and prevention programs*. Research in Action, NCJ 155182. Washington, D.C.: U.S. Department of Justice, National Institute of Justice.

Roberts, D.J. 1998. *Integrated justice information systems for State and local jurisdictions: An overview of planning activities for the Office of Justice Programs*. Sacramento, California: SEARCH.

Schmidt, P., and A.D. Witte. 1989. Predicting criminal recidivism using "split population" survival time models. *Journal of Econometrica* 40:141–159.

———. 1984. *An economic analysis of crime and justice: Theory, methods, and applications*. Orlando, Florida: Academic Press.

Scoggins, J., T.H. Tidrick, and J. Auerback. 1986. Computer use in local government. *The municipal year book 1986*. Washington, D.C.: International City Management Association.

SEARCH. 1997. *Survey of State criminal history information systems, 1995*. Cooperative agreement no. 95–RU–RX–K001, NCJ 163918. Washington, D.C.: U.S. Department of Justice, Bureau of Justice Statistics.

———. 1993. *Survey of criminal history information systems, 1993*. Grant no. 92–BJ–CX–K012. Washington, D.C.: U.S. Department of Justice, Bureau of Justice Statistics.

SEASKATE, Inc. 1998. *The evolution and development of police technology*. Technical report prepared for the National Committee on Criminal Justice Technology. Grant no. 95–IJ–CX–K001 (S-3), NCJ 173179. Washington, D.C.: U.S. Department of Justice, National Institute of Justice.

- Sparrow, Malcolm K. 1994. *Imposing duties: Government's changing approach to compliance*. Westport, Connecticut: Praeger.
- . 1993. *Information systems and the development of policing*. Perspectives on Policing, NCJ 139306. Washington, D.C.: U.S. Department of Justice, National Institute of Justice, and Harvard University, John F. Kennedy School of Government.
- . 1991. Information systems: A help or hindrance in the evolution of policing? *Police Chief* 58 (4): 26–44.
- . 1988. *Implementing community policing*. Perspectives on Policing, NCJ 114217. Washington, D.C.: U.S. Department of Justice, National Institute of Justice, and Harvard University, John F. Kennedy School of Government.
- Sparrow, M.K., M.H. Moore, and D.M. Kennedy. 1990. *Beyond 911: A new era for policing*. New York: Basic Books.
- Standish Group. 1996. Unfinished voyages. Retrieved 13 January 2000 from the World Wide Web: <http://www.standishgroup.com/voyages.html>
- . 1995. Chaos. Retrieved 13 January 2000 from the World Wide Web: <http://www.standishgroup.com/chaos.html>
- State Justice Institute. 1997. *Improving the quality of American justice 1987–1997*. Alexandria, Virginia: State Justice Institute.
- Tapscott, Don, and Art Caston. 1993. *Paradigm shift*. New York: McGraw-Hill.
- Thayer, R.H., A. Pyster, and R.C. Wood. 1982. Validating solutions to major problems in software engineering project management. *Computer* 15 (8): 65–77.
- Travis, J. 1997. Technology in criminal justice: Creating the tools for transformation. Opening address to the Academy of Criminal Justice Sciences, 13 March. Retrieved 13 January 2000 from the World Wide Web: www.ojp.usdoj.gov/nij/speeches/acjs.htm.
- Trojanowicz, R., and B. Bucqueroux. 1990. *Community policing: A contemporary perspective*. Cincinnati: Anderson Publishing Company.
- Turban, E., E. McLean, and J. Wetherbe. 1999. *Information technology for management*. New York: John Wiley & Sons.
- Turner, J.A. 1982. Observations on the use of behavioral models in information systems research and practice. *Information and Management* 5:207–213.
- U.S. Department of Commerce, Office of Technology Policy. 1997. *America's new deficit: The shortage of information technology workers*. Retrieved 12 January 2000 from the World Wide Web: <http://www.ta.doc.gov>.

U.S. Department of Justice, Association of State Correctional Administrators, Corrections Program Office, Bureau of Justice Statistics, and National Institute of Justice. 1998. *State and Federal corrections information systems: An inventory of data elements and an assessment of reporting capabilities*. NCJ 170016. Washington, D.C.

U.S. Department of Justice, Bureau of Justice Assistance. 1996. *System integration: Issues surrounding integration of county-level justice information systems*. Monograph, NCJ 156841. Washington, D.C.

U.S. Department of Justice, Bureau of Justice Assistance. 1994. *Understanding community policing: A framework for action*. Monograph, NCJ 148457. Washington, D.C.

U.S. Department of Justice, National Institute of Corrections. 1995. *Survey of corrections technology*. Washington, D.C.

U.S. Department of Justice, National Institute of Justice. 1998. *Building knowledge about crime and justice: The 1999 research prospectus of the National Institute of Justice*. NCJ 172883. Washington, D.C.

U.S. Department of Justice, National Institute of Justice. 1994. National Institute of Justice announces opening of the National Law Enforcement Technology Center. *Technology Beat* (October): 1-2.

U.S. General Accounting Office. 1997a. *High risk areas: Actions needed to solve pressing management problems*. Doc. no. GAO/AIMD/GGD-97-60. Washington, D.C.

———. 1997b. *Managing technology: Best practices can improve performance and produce results*. Doc. no. GAO/T-AIMD-97-38. Washington, D.C.

———. 1996. *Information technology investment: Agencies can improve performance, reduce costs, and minimize risks*. Doc. no. GAO/AIMD-96-64. Washington, D.C.

———. 1994. *Executive guide: Improving mission performance through strategic information management technology: Learning from leading organizations*. Doc. no. GAO/AIMD-94-115. Washington, D.C.

U.S. House. 1997a. *Computer Security Enhancement Act of 1997*. 105th Cong., 1st sess., H.R. 1903. Retrieved 27 January 2000 from the World Wide Web: <http://thomas.loc.gov/cgi-bin/query/z?c105:h.r.1903>.

———. 1997b. *Data Privacy Act of 1997*. 105th Cong., 1st sess., H.R. 2368. Retrieved 27 January 2000 from the World Wide Web: <http://thomas.loc.gov/cgi-bin/bdquery/z?105:h.r.2368>.

Walker, J.D. 1995. The challenging voyage to statewide court automation. *Court Technology Bulletin* 7 (2): 9.

Walker, L. 1996. Court technology information trends. *Court Technology Bulletin* 8 (2): 7.

Explaining Regional and Urban Variation in Crime: A Review of Research

by Graham C. Ousey

Beginning with the moral statisticians Guerry and Quetelet and continuing to the present, criminologists have repeatedly shown that serious crime rates vary across geographic units. The most prominent framework for explaining this variation is the macrosocial perspective, which asserts that the crime rate is a reflection of social organization. In this paper, I review research from the past few decades that examines the distribution of crime across regions, metropolitan areas, cities, and neighborhoods. Research on the regional variability in crime primarily has focused on explaining Southern/non-Southern differences in homicide through two theoretical models: the Southern culture of violence and economic deprivation. Despite some inconsistency in this literature, there is considerable evidence that supports each view. Studies examining variation in crime across cities and metropolitan areas have mostly focused on two explanatory perspectives: social stratification and social control. Within the social stratification literature, there is a lively debate between proponents of absolute and relative deprivation models. Although the evidence is somewhat mixed, research suggests that as both absolute and relative deprivation increase, there is a corresponding increase in aggregate crime rates. Research on the social control perspective generally supports the view that cities and metropolitan areas with higher levels of informal social control (e.g., family structure, residential stability) have lower crime

Graham C. Ousey is Assistant Professor of Sociology at the University of Kentucky, Lexington.

rates. Finally, neighborhood-level research shows that recent extensions of the macrolevel social control model have improved explanations of community-level variation in crime rates. Indeed, the evidence suggests that neighborhoods with higher levels of informal social control (e.g., peer supervision, social ties, collective efficacy) have lower crime rates. However, these social control effects vary by the race and class composition of neighborhoods. Important directions for future research on regional and urban variation in crime are discussed.

Aggregate-level research on crime can be dated to the work of the moral statisticians Guerry and Quetelet, who were among the first to formally note that rates of crime were distributed unevenly across geographic space. In the United States, H.V. Redfield (1880) was one of the first to study spatial variation in crime, observing that crime rates were highest in the Southern United States. Since Redfield's pioneering work, interest in the differential distribution of crime across geographic areas has grown tremendously. As interest has grown, scholars have come to realize that understanding the correlates of variation in crime rates across metropolitan areas, cities, and neighborhoods is as important as understanding the etiology of regional crime differences.

The most prominent explanations of the observed aggregate-level variation in crime are derived from a macrosocial perspective. In contrast to individual-oriented perspectives that assume that crime rates are the sum of the behavior of individuals, the macrosocial perspective asserts that crime rates are an aggregate-level property that reflects the social organization of the community or society. Given this view, macrosocial explanations of crime are rooted in the two major components of social organization: social structure and culture. Social structure refers to the positions, networks, and institutions that provide the basic framework for society. Social structural theories of crime emphasize the ways in which the distribution of these positions, networks, and institutions affects the crime rate in a community. Culture refers to values, beliefs, norms, symbols, and other products of human social communities (Gelles and Levine 1999). Cultural theories of crime focus on how areal differences in values, norms, and beliefs lead to aggregate-level variation in crime rates.

In this chapter, I review research from the past few decades that examines variation in crime rates across regions, metropolitan areas, cities, and neighborhoods. The paper has four sections. The first describes regional differences in several forms of serious crime since 1960, and then reviews research examining cultural and structural explanations of these regional crime differences. The second section discusses variation in crime rates across cities of varying population size and reviews macrolevel research on serious crime rates in metropolitan areas and cities. The third section is a summary of recent theoretical and empirical work on social disorganization theory, the most prominent explanation of neighborhood-level variation in crime. Finally, from the data presented and research reviewed, I discuss promising directions for future inquiry on regional and urban variation in crime rates.

Regional Variation in Serious Crime

Trends in serious crime by region

In the United States, Redfield (1880) began the regional crime research tradition when he showed that homicide was concentrated in the South. Following his work, scholars frequently have documented regional variation in serious crime rates in the United States. In the paragraphs that follow, I use the Federal Bureau of Investigation's (FBI's) Uniform Crime Report data to examine continuity and change in regional differences in homicide, robbery, and burglary rates over the past four decades.

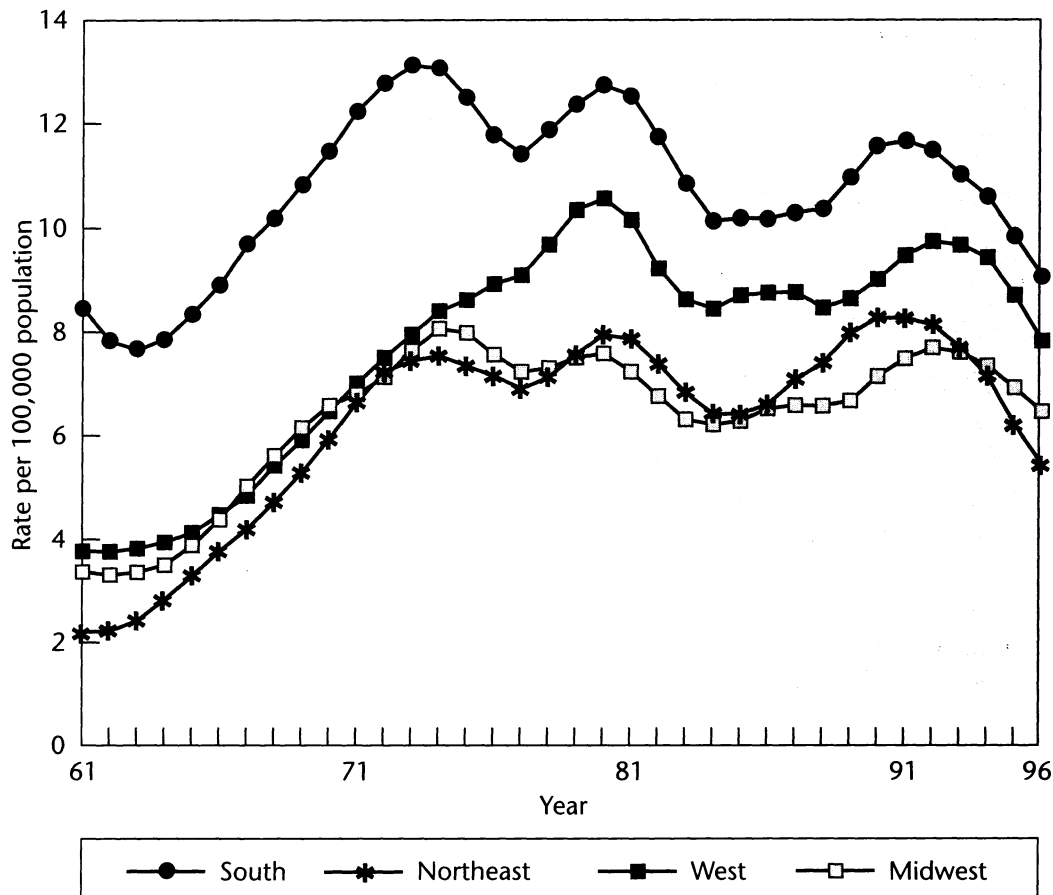
Exhibit 1 is a graph of the 3-year moving average homicide rate for each region for the 1961–96 period.¹ One noteworthy feature is the remarkable similarity in homicide trends by region. In each region, there is a substantial and rather monotonic increase in homicide rates that begins in the early 1960s and ends in the mid-1970s. Following this upswing, rates fluctuate until around 1993, when a fairly substantial trend of decreasing homicide rates occurs in each region.

In addition to the notable similarity in the overall patterns of homicide for each region, there is tremendous continuity in the South's position as the most homicidal region of the United States. Consistent with the findings reported by many previous scholars, the South has the highest homicide rate every year between 1960 and 1997. However, the gap in homicide rates between the South and the other regions has narrowed considerably in the past 40 years. Indeed, while the ratio of the South's homicide rate to each of the other regions ranged between 2.5 (South/West) and 4.3 (South/Northeast) to 1 in 1960, by 1997, these ratios dropped to between 1.2 (South/West) and 1.8 (South/Northeast) to 1. Thus, in terms of homicide rates, the South and non-South have become less distinct over time.

Overall, robbery rates (exhibit 2) follow a temporal pattern similar to that observed for homicide. That is, relatively low rates in the early 1960s begin to ascend sharply in the mid-1960s, peak in the early 1980s and early 1990s, and fall substantially through the late 1990s.

More interesting is the fact that the South has relatively low robbery rates when compared with the other regions of the country. Indeed, the South has the lowest robbery rate through the early 1980s and the second lowest rate for the remaining years studied. However, as with homicide, the gap between the South and the other regions declined over time. In fact, by the late 1990s, the robbery rate in the South is nearly identical to the rates observed in the Northeast and West. Finally, the change in the position of the Midwest in the

**Exhibit 1. Homicide rates by region, 1961–96
(3-year moving average)**

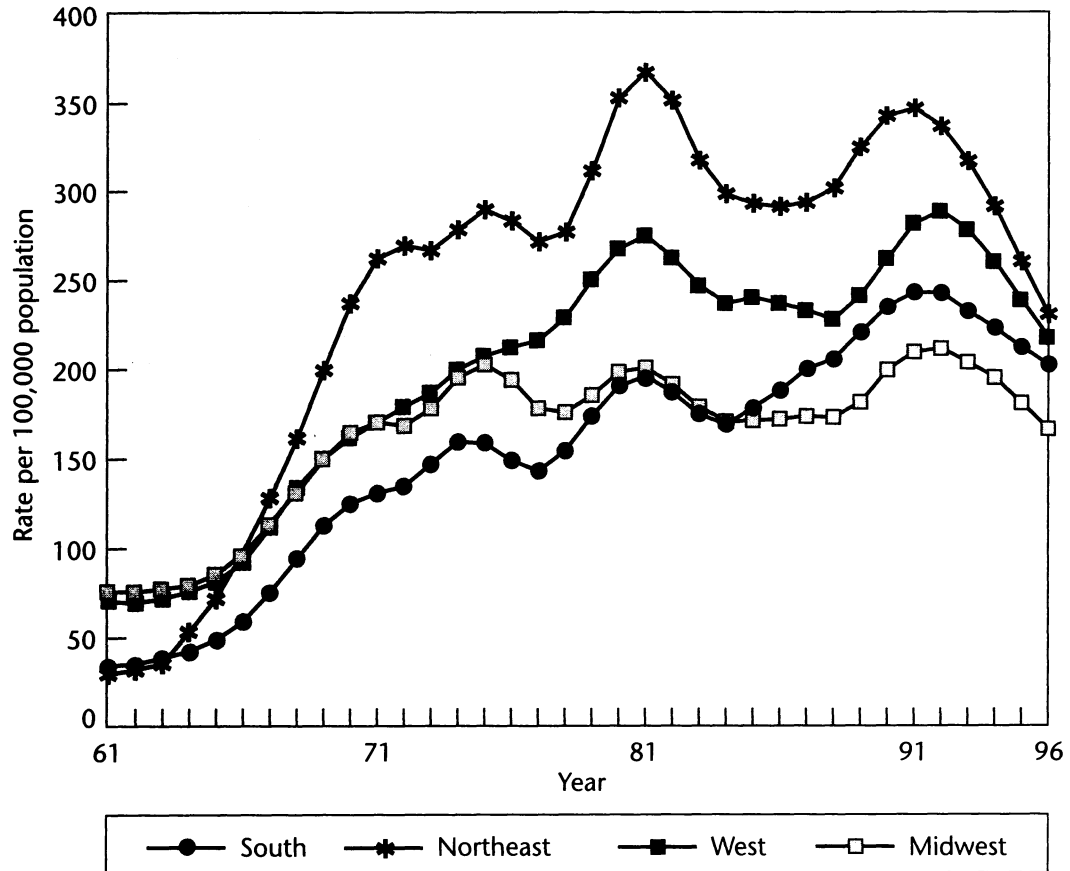


Source: U.S. Department of Justice, Federal Bureau of Investigation 1960–97.

regional robbery rate rankings also is conspicuous. In 1960, the Midwest showed the highest rate of robbery. However, since then, the increase in robbery rates in the Northeast, West, and South outpaced those experienced in the Midwest. Consequently, by 1985, robbery rates in the Midwest dropped below those of the other regions and have remained there through the late 1990s.

Consistent with the patterns for homicide and robbery, burglary rates (exhibit 3) were relatively low in 1960 and began a sharp increase in the early to middle 1960s, reaching a high point in the early 1980s. However, unlike the trends for homicide and robbery rates, burglary rates exhibit a rather consistent decline after the peak of the early 1980s. The only noticeable exception to this pattern occurred in the South between 1984 and 1988, when burglary rates increased.

**Exhibit 2. Robbery rates by region, 1961–96
(3-year moving average)**

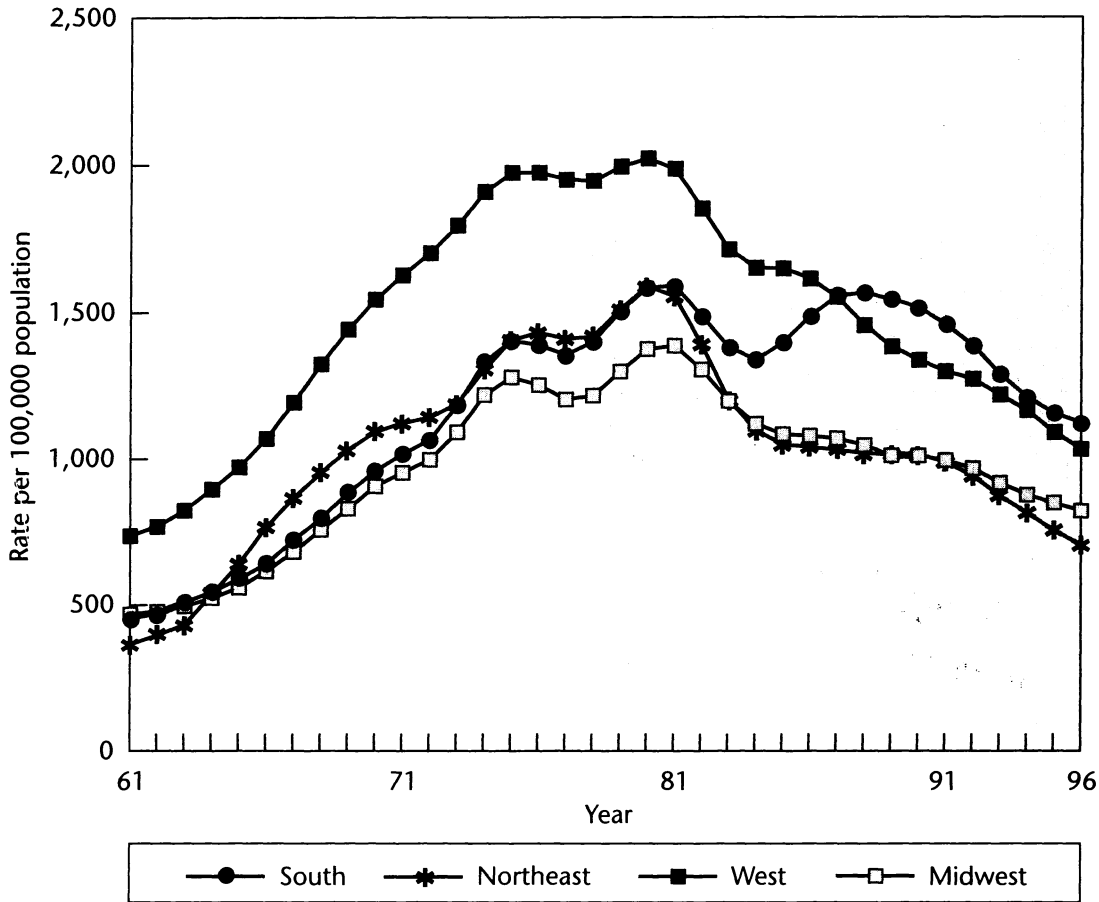


Source: U.S. Department of Justice, Federal Bureau of Investigation 1960–97.

Through 1986, burglary rates were markedly higher in the West than in the other three regions of the United States. On the other hand, rates in the Northeast, South, and West were quite similar. In 1984, however, this pattern changed. Burglary rates in the South began to ascend, while those in the Northeast, Midwest, and West remained flat or declined. Thus, by 1987, burglary rates in the South surpassed those in the West. Since that time, burglary rates in the South have remained slightly higher than those in the West, although both regions have shown a general decline throughout the 1990s.

To summarize, the data show that all four regions of the Nation experienced roughly similar trends in homicide, robbery, and burglary between the early 1960s and the late 1990s. Nonetheless, there were substantial differences between

**Exhibit 3. Burglary rates by region, 1961-96
(3-year moving average)**



Source: U.S. Department of Justice, Federal Bureau of Investigation 1960-97.

regions in homicide, robbery, and burglary rates throughout this period. Most prominent among these regional differences is the gap in homicide rates between the South and non-South. Throughout the four decades discussed, the South had a higher rate of homicide than any of the other regions. However, evidence suggests that regional homicide rates have converged to some degree over the past four decades. Less prominent but still interesting are regional differences in robbery and burglary offending rates. Robbery rates in the Northeast exceed those of the other regions throughout the final three-fourths of the period examined. Meanwhile, during the first three-fourths of the period, rates of burglary in the West are noticeably higher than outside the West.

The Southern culture of violence model attributes the South's high homicide rates to cultural values that evolved from that region's unique history. Two prominent aspects of this culture are an exaggerated sensitivity to derision and the expectation that indignities will be handled personally, promptly, and violently.

Explaining South/non-South differences in criminal violence

There is a long tradition of research documenting the high homicide rates in the Southern United States (Hoffman 1925; Brearley 1932; Lottier 1938; Porterfield 1949). As the preceding analysis suggests, regional differences in homicide remain evident throughout the past four decades. Due in part to the remarkable persistence of these differences, researchers have become increasingly interested in explaining the South's proclivity for lethal violence. To date, two general explanatory models have framed research in this area: the Southern culture of violence and economic deprivation.

Culture of violence versus economic deprivation

The Southern culture of violence model attributes the South's high homicide rates to cultural values that evolved from that region's unique history. Two prominent aspects of this culture are an exaggerated sensitivity to derision and the expectation that indignities will be handled personally, promptly, and violently. Some have described this Southern perspective as a "siege mentality" and consider it a reaction to non-southerners' frequent assaults on the historical peculiarities associated with life in the South (e.g., the institution of slavery, the persistence of agriculture and rural lifestyles) (Hackney 1969). Still others blame proviolence values on the lawlessness of the Southern frontier, which required people to resolve their disputes through informal means (e.g., duels, brawls, etc.) (Brearley 1932; Bruce 1979; Reed 1982). Regardless of the origin of this Southern culture, its most important implication is that violence is condoned in a broader range of situations than is acceptable in non-Southern cultures. As a consequence, interpersonal disputes are more likely to be resolved through violent means, resulting in a high violent crime rate.

Most contemporary researchers view the empirical studies of Hackney (1969) and Gastil (1971) as starting points for the recent debate on the source of the South's high violence rates. Consistent with the Southern culture of violence perspective, Hackney and Gastil report that after accounting for the influence

of economic and structural characteristics, rates of lethal violence remain higher in the South than in the non-South. They interpret these findings as evidence that differences in cultural values, rather than structural conditions, are responsible for high rates of homicide in the South.

In contrast to the Southern culture of violence model, the economic deprivation perspective suggests that high rates of poverty and economic distress explain the comparatively high violence rates in the South. Although this perspective does not necessarily deny that regional value differences exist, it suggests that these differences have little impact on crime rates, once socioeconomic differences are controlled. Support for the economic deprivation over the Southern culture of violence model was first reported by Loftin and Hill (1974), who found that South/non-South differences in homicide rates are explained entirely by regional differences in economic disadvantage.

Subsequent studies testing the merits of these two competing perspectives have produced inconsistent results. Although a number of studies report important South/non-South differences in homicide after controlling for socioeconomic conditions (Blau and Blau 1982; Messner 1982, 1983a; Simpson 1985; Rosenfeld 1986; Fowles and Merva 1996; Land, McCall, and Cohen 1990; Peterson and Krivo 1993; Parker and McCall 1997; Ousey 1999), several others do not (DeFronzo 1983; Williams 1984; Corzine and Huff-Corzine 1992; Harer and Steffensmeier 1992; Phillips 1997; Bailey 1984; Jackson 1984; Loftin and Parker 1985; Messner and Golden 1992; Smith 1992; Chamlin and Cochran 1997; Kovandzic, Vieraitis, and Yeisley 1998). And a few studies report that the degree of support for the cultural model depends on racial characteristics (Huff-Corzine, Corzine, and Moore 1986; Parker and McCall 1997; Ousey 1999) and circumstances (see Parker 1989; Peterson and Krivo 1993; Parker and McCall 1997) of homicide offenders and/or victims.

Reconciling inconsistent findings

The preceding review reveals inconsistent findings on the Southern culture of violence thesis. In an assessment of this inconsistency, Williams and Flewelling (1988) point to two major methodological problems: (1) the failure to separate total homicide rates into conceptually meaningful subtypes; and (2) the inadequate measurement of violent cultural orientations. With regard to the first problem, they contend that the theoretical models featured in previous research (e.g., subculture of violence, economic deprivation) are more applicable to some subcategories of homicide than others. For instance, they note that "a violent cultural orientation is more likely to produce deaths that spring from heated arguments

among intimates than to produce serial killings, contract killings, or random sniper attacks” (Williams and Flewelling, p.422). On the other hand, because economic deprivation may intensify interpersonal conflict *and* reduce the availability of nonviolent methods of conflict resolution, they expect it to affect a wider range of homicide subtypes (e.g., conflict and nonconflict homicides).

In reference to the second problem (i.e., the inadequate measurement of violent cultural orientations), Williams and Flewelling propose that the “justifiable homicide ratio” (measured as the ratio of the number of justifiable homicides per 100 criminal homicides) is a better measure of violent cultural orientations than the region-based measures frequently used in previous research. They suggest that in cities with a stronger violence orientation, officials are more likely to interpret intentional killings as justified, giving such cities higher justifiable homicide ratios.

Consistent with their expectations, Williams and Flewelling (1988) find that economic deprivation (measured by the percentage poor) affects conflict and nonconflict homicides occurring between family members, acquaintances, and strangers. In addition, violent cultural orientations (measured by the justifiable homicide ratio) have greater effects on conflict than nonconflict homicide rates. However, in contrast to the predictions of the Southern culture of violence model, there is little evidence of regional differences in homicide rates. In total, these findings suggest that some of the contradictory findings from earlier research may be a product of inadequate conceptualization and measurement of homicide and its cultural antecedents. By disaggregating homicide into conceptually meaningful subcategories and using a more refined measure of violent cultural orientations, Williams and Flewelling find support for both culture of violence and economic deprivation explanations of homicide rates.

In another attempt at reconciling the findings from previous homicide research, Land, McCall, and Cohen (1990) posit that many contradictory findings are the result of high correlations among independent variables. To alleviate this problem, the authors create a series of scales that combine several highly correlated independent variables. They find that these scales have remarkably similar effects on city-, metropolitan area-, and State-level homicide rates at three different points in time (i.e., 1960, 1970, and 1980). More importantly, they report that net of economic deprivation variables, the South region variable has a significant association with city and metropolitan area homicide rates in 1960, 1970, and 1980 and with State-level homicide rates in 1960. Taken together, these results are strong evidence in support of the Southern culture of violence perspective.

Research on the generality and continuity of the Southern culture of violence

As the preceding review demonstrates, most previous studies on South/non-South differences in violence have examined only *homicide* rates. But McCall, Land, and Cohen (1992) extend this literature by exploring whether the southern culture of violence model can be generalized to explain robbery, assault, and rape. In addition, they test Brearley's (1932) prediction that South/non-South differences in violence will diminish over time. With regard to the former issue, they find that the effect of the South is not generalizable across all types of criminal violence, but is confined to homicide and assault. They interpret this as evidence that the cultural code of the South supports violence in defensive (e.g., defending one's honor when insulted), rather than offensive (e.g., stealing another person's jewelry), situations. On the latter issue, their results indicate that the South's influence on assault rates in cities and metropolitan areas has declined over time (see also Land, McCall, and Cohen 1990).

O'Carroll and Mercy (1989) also report evidence supporting the idea that the South effect on homicide rates is abating. Although they report that total homicide victimization rates are higher in the South, they also show that black and white homicide rates are higher in the West region. They attribute these paradoxical results to two factors. First, blacks have a much higher homicide rate than whites, regardless of region. Second, compared with the other regions, blacks comprise a much larger proportion of the South's total population. Thus, the combination of the high proportion of black residents in the South and their high homicide rates results in a *total* homicide rate in the South that exceeds the rate in the Northeast, Midwest, and West.

In a reexamination of O'Carroll and Mercy's (1989) findings, Nelsen, Corzine, and Huff-Corzine (1994) confirm that both black and white homicide death rates are higher in the West than the South. However, they find that when the influence of the percentage of Hispanics is taken into account, white homicide rates are highest in the South. Thus, although some studies suggest a diminishing impact of region on violence rates (McCall, Land, and Cohen 1992; O'Carroll and Mercy 1989), others (Nelsen, Corzine, and Huff-Corzine 1994) indicate that a culture of violence may still exist among *non-Hispanic whites* in the South.

Summary of findings from the regional crime literature

- Although not entirely consistent, there is evidence of a South region effect on some violent crimes. In particular, research suggests that compared with other regions, southern areas of the United States have higher primary and

conflict homicide rates and higher assault rates. On the other hand, rates of instrumental violence (e.g., robbery and felony homicides) are lower in the South than in other regions.

- The preponderance of the regional homicide studies suggests that economic deprivation is an important predictor of variation in homicide rates. Moreover, some studies indicate that the South's influence on homicide rates is entirely explained by regional variation in economic disadvantage. However, the evidence is inconsistent and many studies are plagued by conceptual and methodological shortcomings that make it difficult to estimate the independent effects of region and poverty on homicide rates.
- Regional homicide research that corrects for common methodological problems has generally found support for variables derived from *both* the economic deprivation and culture of violence explanations.
- The South's effect on homicide and assault rates appears to be diminishing over time, although the evidence is not completely consistent. Given the proliferation of interstate highways, inexpensive air travel, mass media, the Internet, satellite communications, and Rust Belt to Sun Belt migration, it seems reasonable to predict that South/non-South differences will continue to abate in the future.
- Although the aggregate-level research on regional differences is often presented as a test of the Southern *culture* of violence theory, no measures of culture actually appear in this literature. Thus, findings regarding the effects of culture on violent crime are inconclusive.
- Finally, given the contradictory findings and methodological limitations of previous research, the impact of culture on Southern homicide rates remains an open question for future researchers working in the macrosocial tradition. However, to avoid simply reiterating the inconsistent findings of past research, it is imperative that criminologists spend time developing reasonable proxies of violent cultural values.

Urban Variation in Serious Crime I: Cities and Metropolitan Areas

Trends in serious crime by size of place

Although the origin of the macrosocial view of crime is linked to interest in regional crime differences, the development of this perspective has expanded to encompass a concern with variation in crime rates across other geographic

units. In fact, in recent years, researchers have shown greater interest in explaining variation in crime rates across metropolitan areas and cities, rather than regions. Later in this section, I review the major studies that make up the core of this literature. However, to provide context, I first review trends in crime across urban places of varying size. As before, I use data from the Uniform Crime Reports and specifically focus my attention on trends in three forms of serious crime: homicide, robbery, and burglary.

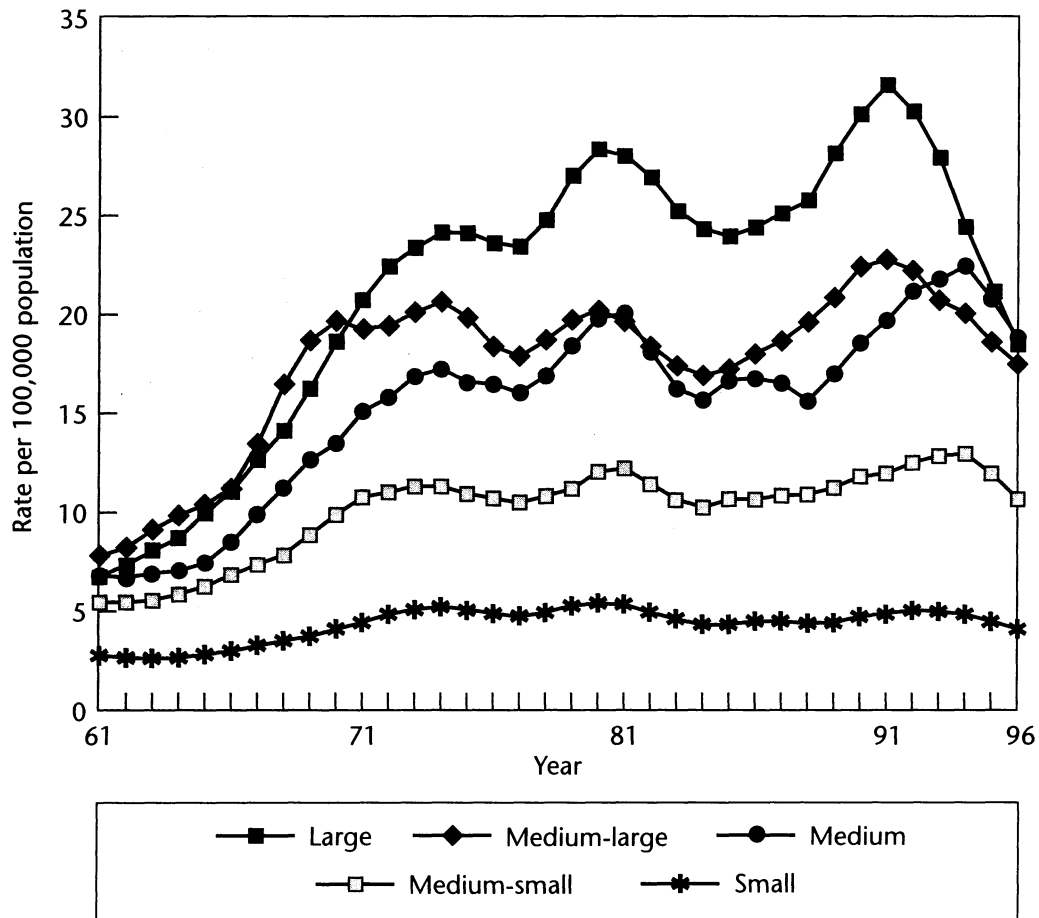
Exhibit 4 is a graph of the 3-year moving average homicide rates by five categories of city size for the 1961 to 1996 period.² For easier description of trends by city size, I label the city-size categories as follows: “large” is defined as cities of 1 million-plus population; “medium-large” is defined as cities with 500,000 to 999,999 persons; “medium” is defined as cities with 250,000 to 499,999 persons; “medium-small” is defined as cities with 100,000 to 249,999 persons; and “small” is defined as cities with fewer than 100,000 persons.

Overall, the trend lines are quite similar in shape. Across all categories, homicide was at its lowest point during the early 1960s. However, between 1962 and 1964, the beginning of an upward trend in lethal violence is observed across all groups of cities. This upward trend is quite substantial and lasts to the middle of the 1970s, when an initial peak in homicide rates is reached. Rates fluctuate slightly over the next couple of years, then reach a second peak around 1980. After this peak, homicide rates slide downward across all city-size categories until the mid- to late 1980s, when a final upsurge in homicide occurs. This final rise in homicide rates has been linked to the proliferation of crack cocaine markets in U.S. cities (Baumer 1994; Baumer et al. 1998; Blumstein 1995). For most of the city-size categories, this last upswing produces the highest homicide rate in the period studied. The one exception is found in small cities, where homicide rates peaked around 1980. After the peak of the early 1990s, homicide rates in all city-size categories begin a pronounced decline into the late 1990s.

Finally, while homicide rates have declined across cities of all sizes in the 1990s, the sharpest decreases in lethal violence are evident in large cities (-41 percent).

For most of the period examined, there appears to be a positive linear relationship between city size and homicide rates. That is, homicide rates are higher in larger cities. However, there are a few exceptions to this pattern. First, for most of the 1960s, the medium-large cities show homicide rates that are slightly above those in the largest cities. Moreover, at the very end of the period examined, homicide rates in medium and large cities are virtually identical, while the rates for medium-large cities are slightly lower.

Exhibit 4. Homicide rates by city size, 1961–96
(3-year moving average)



Source: U.S. Department of Justice, Federal Bureau of Investigation 1960–97.

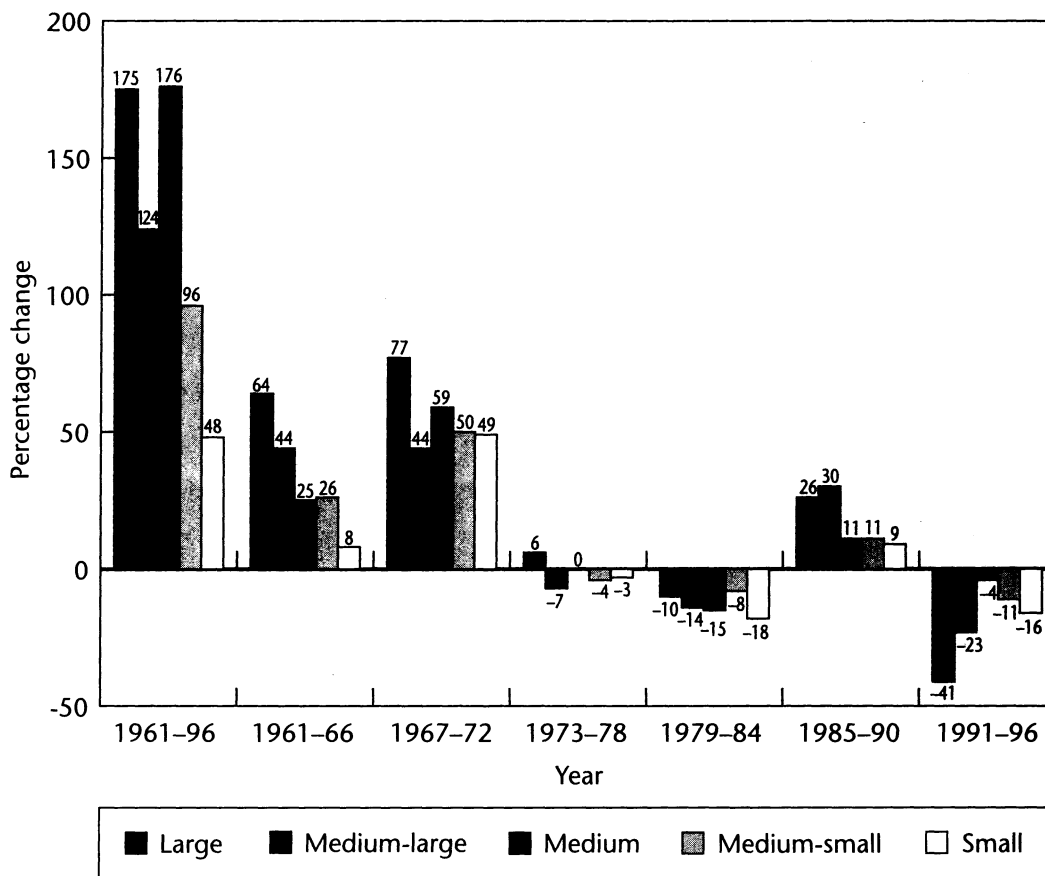
Through the early to mid-1970s, an upward trajectory in homicide rates is observed for all five city-size categories. However, the overall rate of increase during this period is greatest for the largest cities (see exhibit 5). For example, between 1967 and 1972, large U.S. cities experienced a 77-percent increase in homicide rates, while small cities experienced a substantial, but comparatively smaller, 49-percent increase. As a result of these differing rates of increase, there is a widening gap in homicide rates between large cities and those of all other size categories through the mid-1970s.

During the late 1970s, homicide rate trends were relatively flat across all city-size categories. Between 1979 and 1984, however, a general decline in homicide rates occurred. The largest rate of decline was observed in small (–18 percent)

and medium (-15 percent) cities. Following this brief period of decline, homicide rates for all categories rose between 1985 and 1990. Consistent with the view that the criminogenic effects of crack were most heavily concentrated in larger cities, the greatest rates of increase in homicide were observed in the two largest city-size categories. Nonetheless, the two smallest categories of urban places also exhibit a modest increase in homicide rates. Finally, while homicide rates have declined across cities of all sizes in the 1990s, the sharpest decreases in lethal violence are evident in large cities (-41 percent).

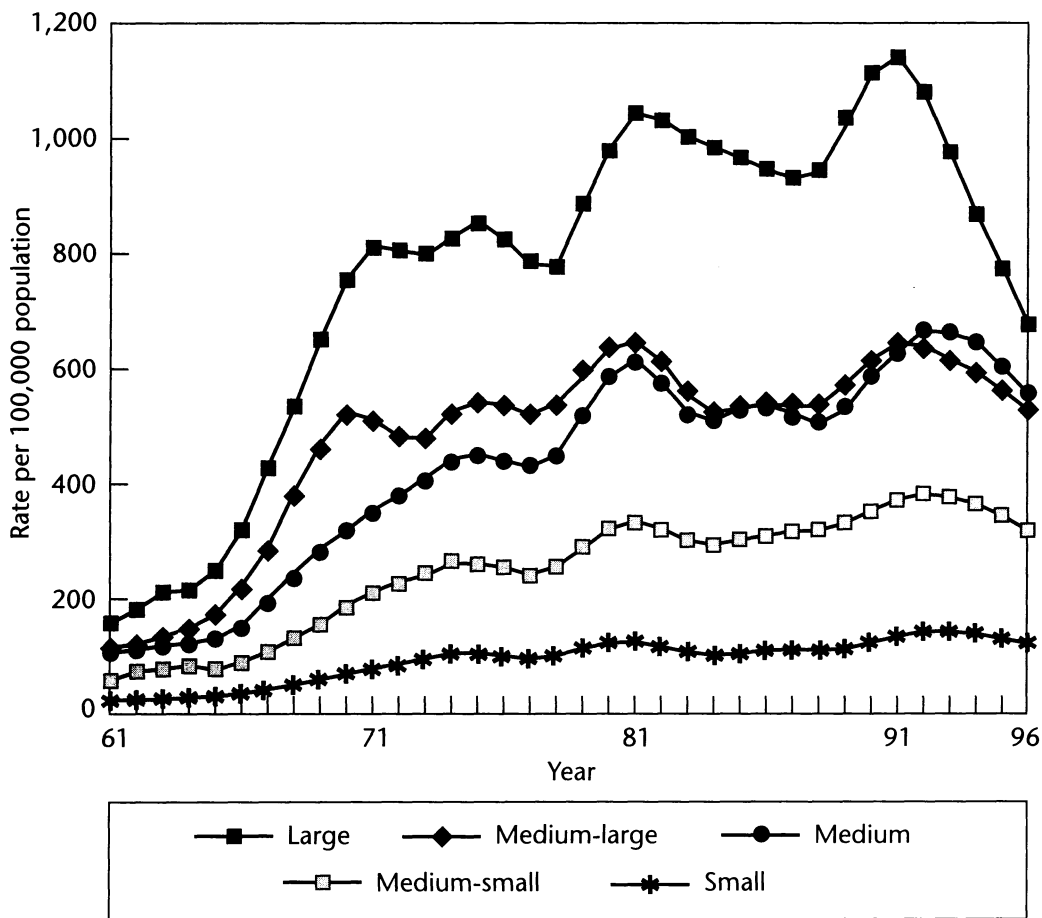
Trends in robbery rates by city size are presented in exhibit 6. For the most part, the patterns observed mirror the trends in homicide discussed previously. On the whole, robbery rates rose most rapidly during the late 1960s and early 1970s. After 1975, rates oscillated around a relatively high mean level. Also consistent with the trends for homicide, robbery rates appear to be positively associated with

Exhibit 5. Percentage change in 3-year average homicide rates, by city size, 1961-96



Source: U.S. Department of Justice, Federal Bureau of Investigation 1960-97.

**Exhibit 6. Robbery rates by city size, 1961–96
(3-year moving average)**

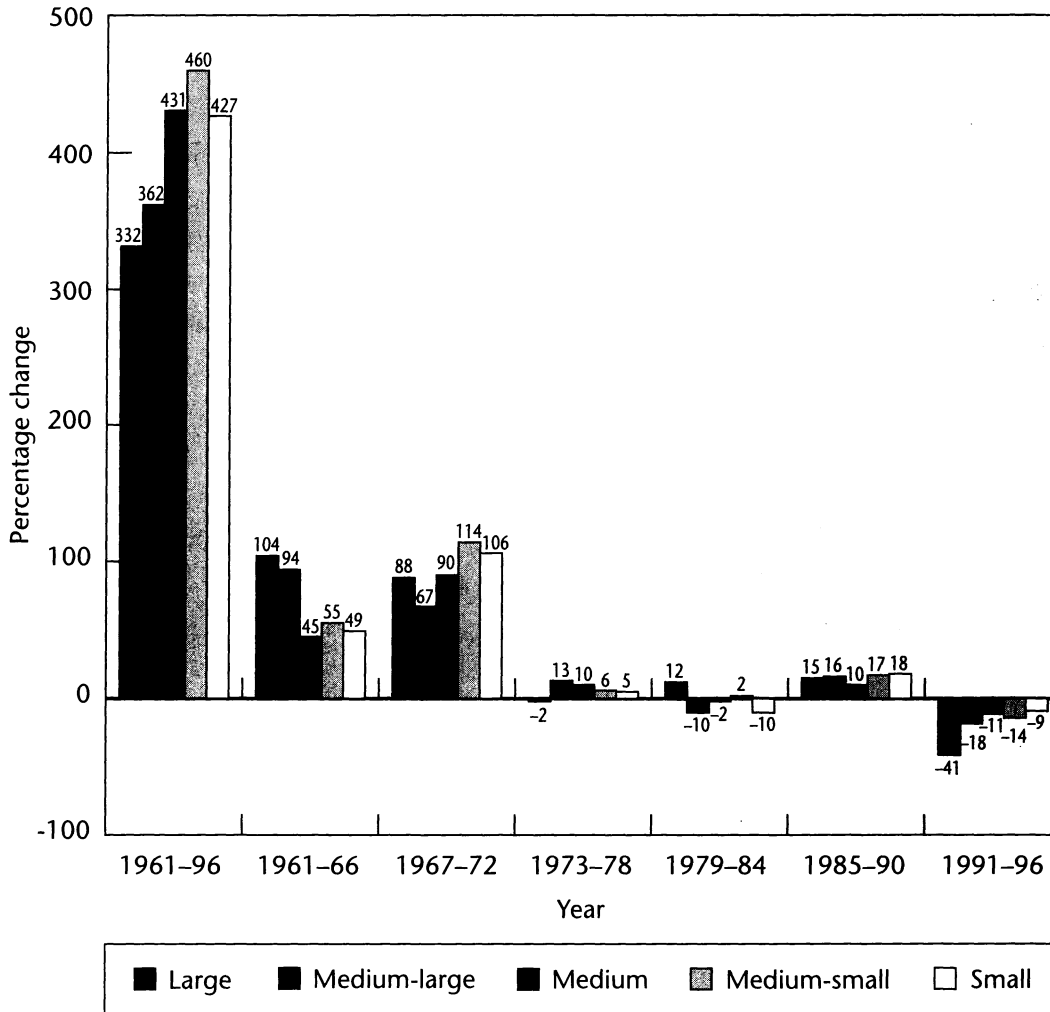


Source: U.S. Department of Justice, Federal Bureau of Investigation 1960–97.

city size. Throughout the period studied, robbery rates are highest in cities with at least 1 million persons and are lowest in cities with fewer than 100,000 persons.

The increase in robbery rates during the 1961–96 period is striking for all city-size categories. For instance, large cities, which show the least change, experienced a 332-percent increase in robbery rates. Moreover, robbery rates in medium-small cities increased nearly fivefold during this period. As with homicide rates, the majority of the increase in robbery rates occurred in the 1960s. Robbery rates then showed little fluctuation between 1973 and 1984, before showing a modest increase in the late 1980s when crack cocaine was introduced into U.S. cities. Finally, there is a trend of declining robbery rates in the 1990s across all city-size categories. Consistent with the data on homicide, the

Exhibit 7. Percentage change in 3-year average robbery rates, by city size, 1961-96

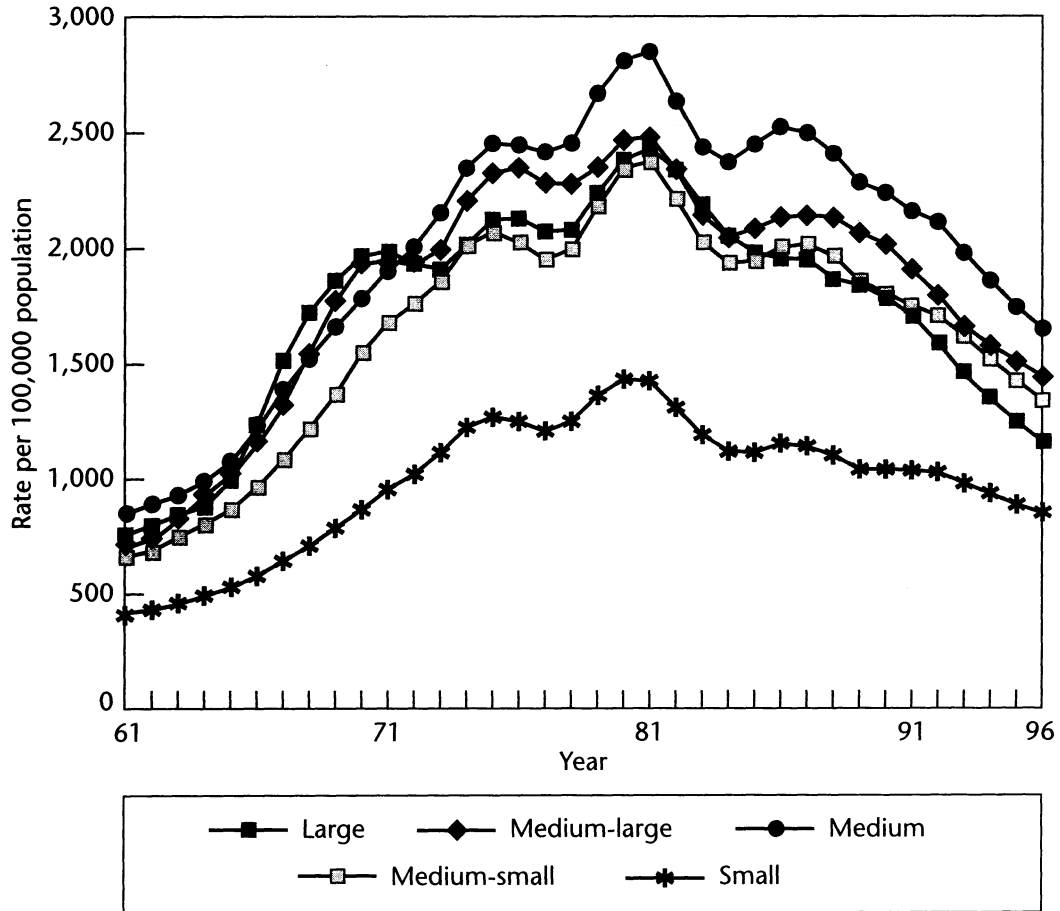


Source: U.S. Department of Justice, Federal Bureau of Investigation 1960-97.

sharpest rate of decrease in robbery rates is observed in the large city category (-41 percent).

Exhibit 8 shows trends in burglary rates by city size between 1961 and 1996. Compared with homicide and robbery, trends in burglary show a number of similarities. First, burglary rates follow a steep upward trend from the early 1960s to the middle 1970s. Second, following a brief decrease, burglary rates rise substantially at the end of the 1970s. In all five size categories, burglary rates peak in either 1980 or 1981. This peak corresponds to a peak in homicide and robbery rates around 1980.

Exhibit 8. Burglary rates by city size, 1961–96
(3-year moving average)

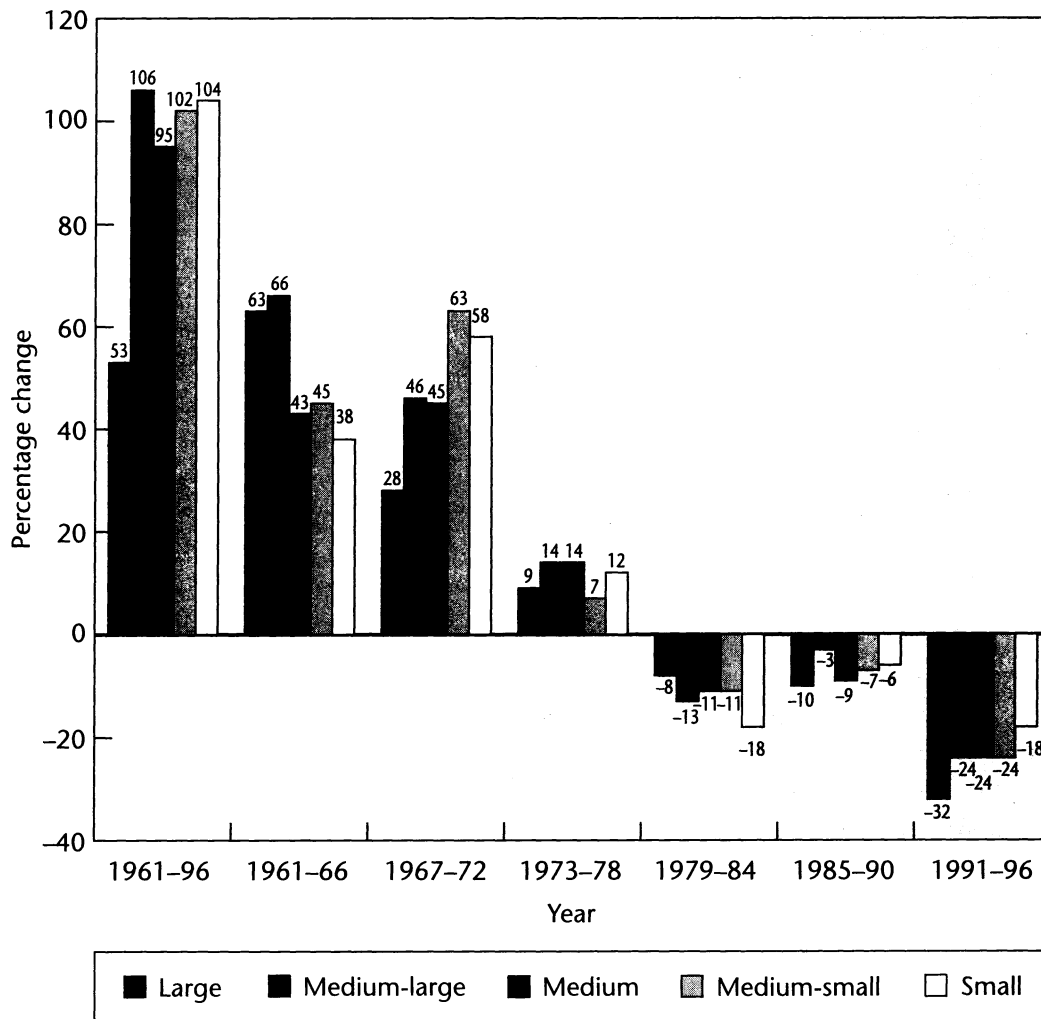


Source: U.S. Department of Justice, Federal Bureau of Investigation 1960–97.

Despite these similarities, burglary trends also exhibit a number of noteworthy differences from homicide and robbery trends. One difference is the relatively steady decline in burglary rates that occurs after a peak around 1980. A second feature that distinguishes the burglary rate trends from those for homicide and robbery is the ordering of the city-size category trend lines. While homicide and robbery rates are highest in the large cities, burglary rates are highest in medium-sized cities across most of the period studied. Moreover, in the 1990s, burglary rates in the large-city category are exceeded by those in the medium-small, medium, and medium-large categories. Thus, the apparent association between crime and city size that was observed in the homicide and robbery trend data does not appear to hold for burglary.

Exhibit 9 shows the percentage change in the 3-year average burglary rates for the 1961–96 period. Two divergent trends are clearly evident in this graph. The first trend is one of increasing burglary rates that culminates around 1980. The second is a consistent decrease in burglary rates in the post-1980 period. Although the percentage increases in burglary rates between 1961 and 1996 are generally smaller than those observed for robbery rates, they are still quite impressive. Indeed, in three of five city-size categories, burglary rates double during this period. Consistent with the homicide and robbery trends, most of this increase occurs in the 1960s. However, in contrast to homicide and robbery, burglary rates show a modest, but consistent, increase across all city-size

Exhibit 9. Percentage change in 3-year average burglary rates by city size, 1961–96



Source: U.S. Department of Justice, Federal Bureau of Investigation 1960–97.

The basic idea is that people evaluate their own economic position relative to others around them. And to the extent that individuals perceive that others have more desired resources than they do, a sense of deprivation, resentment, and anger develops. These feelings of deprivation are particularly severe if individuals feel the unequal distribution of resources is unjustified or if they feel powerless to improve their relative socioeconomic standing.

categories through the late 1980s. Finally, like the patterns observed for homicide and robbery rates, in the final period examined, the sharpest decline in burglary rates occurs for the large-city category.

To summarize, an analysis of trends in homicide, robbery, and burglary during the 1961 to 1996 period reveals several things. First, rates for all offenses have increased remarkably. Indeed, across most of the city-size categories examined, homicide, robbery, and burglary rates have more than doubled since the early 1960s. Second, the rate of increase is greatest for robbery (332 percent to 460 percent), followed by homicide (48 percent to 176 percent) and burglary (53 percent to 106 percent). Third, although the magnitude of the increase varies by offense type, timing is similar. In all three offense categories, most of the increase occurs prior to 1975. Since 1975, fluctuations in homicide, robbery, and burglary rates have been relatively modest. Finally, the greatest decrease in crime rates is observed in the 1990s, particularly in the large cities.

Explaining city and metropolitan area variation in serious crime

Serious crime is disproportionately concentrated in urban areas.³ In fact, while roughly 75 percent of the U.S. population is classified as urban (U.S. Bureau of the Census 1991), more than 95 percent of all Index crimes reported to the police occur in cities and metropolitan areas (U.S. Department of Justice

1997). Thus, during the rapid increase in crime rates of the 1960s and 1970s, there was increasing pressure to study metropolitan area and city crime rates in an attempt to understand this major crime wave. Consequently, criminologists initiated a line of city and metropolitan research that quickly grew larger than the regional crime literature that had preceded it. And while cultural arguments have appeared in this literature, two classic structural frameworks have guided much of this research: *social stratification* and *social control*.

The social stratification perspective

The social stratification perspective asserts that crime is related to economic conditions. This view dates to antiquity and is evident in various sociological theories of crime. However, two variants of the social stratification perspective have dominated research on city and metropolitan area crime rates. The first, called the absolute deprivation model, emphasizes the crime-producing effects of earning an income that falls below a level necessary to maintain basic subsistence. This view suggests that crime is one of the primary sources of subsistence available to residents of poverty-stricken areas. In addition, the absolute deprivation model posits that the stressful and dehumanizing effects of a life of severe economic disadvantage produce frustration and anger that become expressed through physical aggression.

The second variant of the social stratification perspective, called the relative deprivation model, emphasizes the criminogenic aspects of socioeconomic inequality rather than absolute levels of poverty. The basic idea is that people evaluate their own economic position relative to others around them. And to the extent that individuals perceive that others have more desired resources than they do, a sense of deprivation, resentment, and anger develops. These feelings of deprivation are particularly severe if individuals feel the unequal distribution of resources is unjustified or if they feel powerless to improve their relative socioeconomic standing.

Research on the absolute deprivation model

The belief that poverty is related to crime is as old as the scientific study of crime itself. Yet this view remains as viable today as ever. In recent decades, a great deal of the interest in the impact of poverty on urban crime rates is attributable to controversial findings reported by Blau and Blau (1982) and Messner (1982). In separate analyses of the impact of poverty on criminal violence, they report evidence contradicting the expectations of the absolute deprivation model. In particular, the Blaus report that poverty has no association with several measures of violent crime, while Messner reports that homicide rates are actually lower in high-poverty areas. Because these findings oppose both a “common sense” understanding of crime and an extensive tradition in criminology, they generated considerable controversy and provided the motivation for a number of subsequent studies.

Most notable among subsequent studies are three (Williams 1984; Bailey 1984; Loftin and Parker 1985) that report that once methodological flaws in the Blaus' and in Messner's research are corrected, findings unequivocally support the predicted association between poverty and violent crime rates.⁴ Despite the consistent findings of these three studies, however, other research estimating the impact of poverty on violent crime is inconclusive. A number of studies support the prediction that high poverty rates are associated with high violent crime rates (Messner 1983b; Sampson 1985; Balkwell 1990; Harer and Steffensmeier 1992; Fowles and Merva 1996; Ousey 1999), others report that the association depends on region (Messner 1983b; Blau and Golden 1986), race (Harer and Steffensmeier 1992; Messner and Golden 1992; Smith 1992; Ousey 1999), and type of violence (Blau and Golden 1986; Fowles and Merva 1996). Meanwhile, others report no significant association between poverty and several forms of criminal violence (Peterson and Bailey 1988; Corzine and Huff-Corzine 1992).

Research on the relative deprivation model

Total and racial inequality. Drawing on several works in the relative deprivation tradition (e.g., Bonger 1916; Merton 1938; Braithwaite 1979), Judith and Peter Blau (1982) posit that socioeconomic inequality, rather than poverty, is the primary economic correlate of criminal violence. Furthermore, they contend that inequality based on ascribed characteristics (e.g., race) holds the greatest violence potential because it violates the spirit of democracy and therefore creates resentment, anger, and aggression. Consistent with their hypotheses regarding the criminogenic effects of inequality, the Blaus report that two measures of income inequality (total and racial inequality) are better predictors of violent crime than poverty. Moreover, as expected, racial socioeconomic inequality has a stronger and more consistent association with measures of criminal violence than total income inequality. On the basis of these findings, the Blaus conclude that both general and ascriptive inequality (i.e., relative deprivation) promote criminal violence, but poverty (i.e., absolute deprivation) does not.

Following the Blaus, a number of researchers have examined the impact of inequality on criminal violence, with inconsistent results. While several studies generally support the expected association between total inequality and violent crime (e.g., see Peterson and Bailey 1988; Harer and Steffensmeier 1992; Fowles and Merva 1996; Kovandzic, Vieraitis, and Yeisley 1998), others do not (Messner 1982; Williams 1984; Balkwell 1990).

Research on the ascriptive inequality thesis shows similarly mixed results. Although several researchers report general (Blau and Golden 1986; Peterson and Bailey 1988; Balkwell 1990; Corzine and Huff-Corzine 1992; Messner and Golden 1992) or partial (Smith 1992) support for the notion that racial inequality engenders violent criminal activity, others report little or no support for this hypothesis (Sampson 1985; Messner and South 1986; Harer and Steffensmeier 1992; Phillips 1997; Parker and McCall 1997).

Balkwell (1990) suggests that inconsistent findings on the ascriptive inequality thesis may be due to two major shortcomings with the way racial (or ascriptive) inequality has been measured in previous research. First, he notes that previous researchers have calculated the degree of economic disparity between racial groups without accounting for the share of the total population that faces the disparity (i.e., the percentage of the population in the racial groups). Consequently, two communities that vary widely in the proportion of their population that is economically disadvantaged could receive the same racial inequality score. Second, previous measures of racial inequality only consider the disparity between whites and blacks. However, in a substantial number of large urban communities, whites and blacks are not the two largest racial groups. Moreover, in some parts of the country (e.g., the Southwest), the most prominent ethnic conflicts occur between Hispanics and whites of European ancestry. Thus, Balkwell suggests that to be consistent with the social-psychological theory underlying the ascriptive inequality-violence thesis, measures of racial inequality need to account for the relative size and economic standing of *all* racial groups in the community being studied. After developing a measure of "ethnic inequality" that addresses these shortcomings, Balkwell finds that this measure has a stronger association with the homicide rate than the frequently used white/black income ratio.

Finally, research by Messner and Golden (1992) suggests that previous contradictory evidence is partially attributable to overlap between traditional measures of racial inequality and other indicators of structural disadvantage (e.g., poverty). Consistent with their argument, Messner and Golden find that after deriving a racial inequality measure that is empirically distinct from other structural variables, analyses generally support the ascriptive inequality thesis.

Within-race inequality. Despite strong support from the studies by Balkwell (1990) and Messner and Golden (1992), the underlying logic of the Blaus' ascriptive inequality thesis is questioned by Harer and Steffensmeier (1992). Drawing on reference-group theory, which suggests that people are most likely to compare themselves with others with whom they share a particular characteristic (e.g., race), Harer and Steffensmeier posit that within-race income

inequality is more likely to produce feelings of resentment than between-race inequality. However, results from their analysis are only partially supportive of this hypothesis. While higher levels of white intraracial income inequality are associated with higher white violent crime rates, black intraracial income inequality is not associated with black violent crime rates. They report similar results in an analysis of the impact of total inequality on race-specific violence rates. Based on these findings, they conclude that the association between income inequality and violence is greater for whites than blacks.

Subsequent research examining the association between intraracial income inequality and race-specific homicide rates is inconsistent. Consistent with Harer and Steffensmeier, Ousey (1999) finds no significant association between intraracial income inequality and homicide among blacks. In contrast, Phillips (1997) reports that metropolitan areas with higher levels of black-to-black income inequality have higher black homicide rates.

Finally, recent research (Shihadeh and Steffensmeier 1994) suggests that *within-race inequality* may affect *black* homicide rates indirectly. In other words, an increase in black-to-black income inequality is associated with an increase in the percentage of single-parent families, which, in turn, is associated with a rise in black violent crime rates.

New avenues in social stratification-crime research

While the absolute versus relative deprivation debate continues, criminologists have also become interested in the impact on crime of other forces of social stratification. Following in the tradition of research on the urban underclass (e.g., see Wilson 1987; Massey and Denton 1993), some recent studies have examined the criminogenic consequences associated with suburbanization (Shihadeh and Ousey 1996), industrial restructuring (Shihadeh and Ousey 1998), and residential segregation (Peterson and Krivo 1993; Shihadeh and Flynn 1996; Shihadeh and Maume 1997).

Drawing on classic human ecological theory, Shihadeh and Ousey (1996, 1998) argue that economic disadvantage and rates of serious crime (especially among blacks) are due to two processes associated with metropolitan expansion and the shift to a post-industrial economy: suburbanization and industrial restructuring. Their city-level research suggests that the exodus of people and low-skill employment from inner-city communities has deleteriously affected the economic and social well-being of remaining residents. And as rates of poverty, joblessness, welfare dependence, and family breakdown have increased, there has been a corresponding increase in rates of serious crime.

Following Massey's (1990) work on the economic and social implications of residential segregation, several scholars (Peterson and Krivo 1993; Shihadeh and Flynn 1996; Shihadeh and Maume 1997) have extended the social stratification-crime literature by investigating the impact on crime of a noneconomic dimension of social stratification: residential segregation. Using city-level data, each of these studies provides evidence indicating that, net of economic variables, higher levels of residential segregation are associated with higher black homicide rates.

The social control tradition

Although the stratification approach has generally dominated research on metropolitan area and city differences in serious crime rates, a growing number of studies have applied a macrolevel social control perspective to the explanation of crime rates in large aggregate units (i.e., metropolitan areas and cities). In general, this perspective suggests that a breakdown of social integration within communities decreases informal social control and, therefore, increases the likelihood of crime. Although this perspective shares with the social stratification perspective the view that poverty is an important determinant of crime rates, it differs by emphasizing the primacy of noneconomic variables (e.g., family structure, population mobility, social heterogeneity) in the explanation of crime.

Macrolevel social control research in the 1970s largely consisted of research on deterrence theory (e.g., see Tittle and Rowe 1974; Geerken and Gove 1977; Greenberg, Kessler, and Logan 1979), which focuses on how the certainty, severity, and celerity of formal sanctions (i.e., prison sentences) affect crime rates. However, in the 1980s, researchers began to apply social control models in the social disorganization tradition to the explanation of city and metropolitan area crime rates. Rather than emphasizing official sanctions, these models emphasize variables that reflect informal social control within an area.

One of the early studies in this tradition is Crutchfield, Geerken, and Gove (1982). Following the logic of the social disorganization theory, these researchers argue that metropolitan areas with larger and more mobile populations will feature lower levels of social integration and, therefore, will have higher violent and property crime rates. Their results suggest that geographic mobility has a significant association with all violent crimes except robbery and all property crimes except auto theft. Moreover, consistent with the macrosocial control model, cities with larger populations tend to have higher assault, robbery, burglary, and auto theft rates. Finally, it is worth noting that

poverty has a significant association with two of the seven Index crimes (assault and burglary) only when the influence of social control variables are taken into account. On the basis of these findings, Crutchfield, Geerken, and Gove (1982) conclude that social integration has a powerful effect on crime rates, while the impact of blocked opportunity (e.g., poverty) is less powerful than previous studies suggested.

In an extension of the macrosocial control model, Sampson (1986) asserts that family disintegration is a major factor affecting informal social control and the rate of illicit behavior within communities. In communities where there is a low concentration of married-couple families, there is reduced participation in voluntary organizations (Sampson 1986; Bloom 1966), less informal guardianship of neighbors' property, and reduced supervision of local youths (Sampson 1986, 1987a). As a consequence, social cohesion and informal social control are weakened and crime becomes more probable. Sampson's analyses reveal that intact families reduce criminal offending. Indeed, both the divorce rate and the percentage of two-parent households generally have the expected effects on homicide and robbery rates. However, there are some exceptions. For example, cities with a greater proportion of two-parent households tend to have higher white adult homicide and robbery rates. Moreover, the divorce rate has no association with rates of black adult homicide and white juvenile robbery. Nonetheless, the weight of the evidence is consistent with the view that, net of economic variables, informal social control measures make substantial contributions to the explanation of variation in rates of violence in U.S. cities.

Phillips (1997) also presents evidence supporting a macrolevel social control model. Using data from large metropolitan areas, she examines whether variables drawn from stratification, social control, or rational choice perspectives are better predictors of variation in black homicide rates. Although support for each of the three perspectives is reported, she concludes that the variables measuring informal social control (population size, percent divorced or separated) have the strongest association with black homicide rates.

The previously cited studies suggest that macrolevel informal social control is an important predictor of crime, net of stratification variables. However, research by Sampson (1987a; see also Sampson and Wilson 1995) indicates that the nexus between social stratification, social control, and serious crime is more complex than these studies suggest. Drawing on Shaw and McKay (1942) and Wilson (1987), Sampson argues that concentrated economic disadvantage increases crime by decreasing the capacity for informal social control within communities. In support of this conceptualization, his analyses show

that an increase in black male joblessness corresponds with an increase in black female-headed households, which, in turn, is associated with higher rates of black homicide and robbery. Moreover, Sampson reports that family disruption has a greater effect on juvenile violence rates than adult rates. He interprets this as an indication that cities with few two-parent families exert less supervision and social control over juvenile peer groups. Finally, although Sampson's analysis is heavily focused on explaining urban violence among blacks, he presents evidence suggesting that the integrated stratification-social control model applies equally well to the explanation of urban violence among whites.

In a similar study, Shihadeh and Steffensmeier (1994) extend Sampson's link between the social stratification and social control models by examining the association between within-race inequality, family disruption, and criminal violence rates among blacks. As expected, they find that black within-race income inequality contributes to black family instability, which is associated with rates of black homicide and robbery.

In addition to the cross-sectional studies previously cited, several longitudinal studies of the macrolevel social control model have been conducted at the city or metropolitan area levels. For example, Chamlin (1989) examines the association between the 1970 to 1980 change in social control variables (i.e., residential mobility, racial heterogeneity, family structure, etc.) on the 1970 to 1980 change in homicide and robbery rates in 109 U.S. cities. Consistent with the macrolevel social control model, he reports that change in residential mobility and poverty affect change in robbery rates, while change in city population size and economic inequality affect change in homicide rates. In contrast, change in family structure has no significant association with change in homicide or robbery rates. Overall, his findings offer general support for the social control model, but the degree of support varies by type of violent offense and measure of social control.

In another longitudinal study, Miethé, Hughes, and McDowall (1991) examine cross-sectional and longitudinal effects of variables reflecting social disorganization theory on homicide, robbery, and burglary rates. Using data from 584 cities in 1960, 1970, and 1980, they report inconsistent support for the social

The majority of the evidence seems consistent with the view that poverty and racial inequality have significant effects on serious crime, particularly homicide. Findings for total and intraracial inequality are less conclusive.

disorganization model. In their cross-sectional analyses, ethnic heterogeneity, residential mobility, and institutional control have expected significant effects on measures of crime. However, results from the change analysis are less supportive. While ethnic heterogeneity has the expected effect on the change in homicide, robbery, and burglary rates, residential mobility and institutional control do not.

Finally, Miethe and Meier (1994) examine the effects of change in social control variables on the change in Index crime rates and report mixed support for the social control model. While the effects of median income, ethnic heterogeneity, and residential mobility vary by the type of offense, rates of all seven Index crimes are higher in cities and metropolitan areas with a lower percentage of two-parent families.

Summary of findings from the metropolitan area/city crime literature

- The debate between absolute and relative deprivation models has no clear winner. Measures of poverty, total inequality, racial inequality, and within-race inequality all have garnered some support in the literature. The majority of the evidence seems consistent with the view that poverty and racial inequality have significant effects on serious crime, particularly homicide. Findings for total and intraracial inequality are less conclusive.
- Evidence suggests that much of the inconsistency in findings may be due to particularly high correlations between poverty and total inequality (measured by the Gini coefficient), which complicates attempts to estimate their unique effects.
- Consistent with Wilson's (1987) notion of *concentration effects*, evidence suggests that the absolute and relative dimensions of deprivation have become less distinct over time.
- Due to difficulty separating the effects of absolute and relative deprivation, some researchers have chosen to combine them in general deprivation indexes. Although this strategy precludes determining the relative importance of two prominent criminological perspectives, it is pragmatic. Indeed, research that employs a deprivation index generally reveals consistent support for the social stratification model (Land, McCall, and Cohen 1990; Messner and Golden 1992).

- The social control model has received fairly strong support in cross-sectional studies of cities and metropolitan areas. In general, the most consistent support has been found for family structure variables (e.g., percentage divorced, female-headed households), but ethnic heterogeneity and residential mobility also have garnered support in various studies.
- Longitudinal studies are relatively uncommon, and compared with cross-sectional studies, provide less consistent support for social control variables.
- Social stratification and social control models are more appropriately conceptualized as complementary, rather than competing, explanations of crime. Several studies indicate that social stratification affects crime by reducing informal social control. That is, greater economic disadvantage (e.g., joblessness, inequality) decreases informal social control (e.g., two-parent households), which, in turn, increases crime.
- Recent work in the stratification tradition suggests that high crime rates may also be associated with noneconomic dimensions of social stratification (e.g., residential segregation).
- Fundamental changes in the demographic and industrial structure of urban areas (e.g., suburbanization and industrial restructuring) have contributed to high crime rates by increasing rates of economic disadvantage.
- Variables reflecting both social stratification and social control models appear to be better predictors of white than black crime rates (especially homicide). Given this relatively persistent finding, race-specific structural theories of crime may be warranted.

Urban Variation in Serious Crime II: Neighborhoods

Explaining neighborhood crime rates: Extensions of the social control model

Although the previous review reveals that the macrolevel social control perspective has been a useful explanation of variation in city and metropolitan area crime rates, the most important work in the macrolevel social control tradition has occurred in neighborhood-level studies and is linked with recent advances in social disorganization theory. The focus on social control variables in explaining neighborhood crime rates follows from the work of Shaw and McKay and their colleagues (e.g., Shaw, Zorbaugh, McKay, and Cottrell 1929;

Shaw and McKay 1942), who were interested in explaining crime rate differentiation between distinct geographic communities within the city of Chicago.

Building on the work of early Chicago School researchers (e.g., Thomas and Znaniecki 1920; Park, Burgess, and McKenzie 1925) who were concerned with the consequences of rapid immigration and industrialization occurring in Chicago in the early 20th century, Shaw and McKay (1942) observed that delinquency rates were highest in ghetto communities closest to the expanding industrial and business district and lowest in the communities farthest away from the industrial center. These areas, they noted, were the least attractive residential zones, were inhabited by recent immigrants, and featured high rates of poverty and population turnover. Based on their observations, Shaw and McKay surmised that natural growth processes associated with industrialization, urbanization, and immigration were responsible for the high crime rates observed in neighborhoods bordering the central business district. Although Shaw and McKay did not explicitly spell out the causal connection between social disorganization and crime, the most common interpretation of their model suggests that a decline in economic status increases both racial heterogeneity and population instability, which, in turn, increases rates of crime and delinquency.

A number of subsequent studies have tested aspects of the traditional Shaw and McKay model (e.g., see Lander 1954; Chilton 1964; Bursik and Webb 1982; Smith and Jarjoura 1988; Bursik and Grasmick 1993a; Warner and Pierce 1993), with generally supportive findings reported. Unfortunately, much of this literature has encountered difficulty when trying to specify the mechanisms that link structural conditions to crime. However, several recent pieces of scholarship (e.g., Sampson 1987b; Bursik 1988; Warner and Rountree 1997) have made significant advances in the social disorganization theory by integrating the disorganization model with the systemic model of community attachment (Kasarda and Janowitz 1974). By defining social disorganization as “the capacity of a neighborhood to regulate itself through formal and informal processes of social control” (Bursik 1988, 526), researchers have been better able to distinguish social disorganization from its causes (low economic status, ethnic heterogeneity, population mobility) and consequences (crime and delinquency) (Bursik 1988).

This systemic social disorganization model posits that the traditional ecological correlates noted by Shaw and McKay (economic disadvantage, racial heterogeneity, and residential instability) affect crime by weakening the informal (e.g., friendship ties) and formal (e.g., participation in local organizations) social networks that facilitate community self-regulation and are the foundation of community social capital (Coleman 1988).

Drawing on Hunter (1985), Bursik and Grasmick (1993b) contend that associational networks provide social control at three distinct levels: private, parochial, and public. At the *private level*, extensive friendship and kinship ties are necessary so that a threatened withdrawal of sentiment has a deterrent effect on the illicit behavior of neighborhood residents. Broad networks that connect nonintimate residents to each other and to local community institutions (e.g., schools, churches, private businesses) contribute to social control at the *parochial level*. Without the existence of such networks, community members are less likely to supervise community activities and intervene when community social order is threatened. Ties between community residents/institutions and extracommunity agencies are necessary for effective social control at the *public level*. Without connection to public-level agencies, a neighborhood is less likely to secure public goods and services that may aid in crime control (e.g., funds for neighborhood watch programs; extra police patrols).

Empirical research on the mediating role of networks or social ties has been rare until very recently. Primarily this is attributable to a lack of available data. Traditionally, census and other official data sources have been used in research examining social disorganization theory. And although these sources contain ample information on structural conditions, no information on social networks is available. Due to these data limitations, most research has essentially replicated the work of Shaw and McKay (1942). Nonetheless, some new insights, such as the discovery of interaction effects between ecological covariates (Warner and Pierce 1993; Taylor and Covington 1988), have been gleaned from this literature.

Fortunately, survey data that contain measures of social ties are increasingly becoming available. As a result, the body of research on the systemic social disorganization model is growing. Findings from early studies estimating the relationship between social networks/informal social control and delinquency are generally supportive, but not entirely so. Maccoby, Johnson, and Church (1958) find that delinquency rates are higher in neighborhoods where few residents know their neighbor's names and share common interests with them. Moreover, Kapsis (1976, 1978) reports that, compared with residents in medium- or high-delinquency areas, residents in low-delinquency communities are more likely to have friendship ties and contact with local institutions. In contrast, Greenberg, Rohe, and Williams (1982) report no significant differences in neighboring and informal control between three low-crime and three high-crime

Infrequent interaction may be indicative of "weak ties," which are important bridges between insular kin and friendship networks within the community.

Contrary to expectations derived from the systemic social disorganization perspective, Warner and Rountree find that social ties have dissimilar effects on assault rates across these neighborhood contexts. In fact, although higher scores on the social ties variable corresponds with lower assault rates in predominantly white neighborhoods, there is no association between social ties and assault rates in predominantly minority and mixed-race neighborhoods.

neighborhoods. However, Taylor, Gottfredson, and Brower (1984) and Simcha-Fagan and Schwartz (1986) report that crime/delinquency rates are lower in neighborhoods with higher levels of organizational participation.

Although not completely consistent, the previously mentioned studies generally support the expected link between informal social control and crime. However, these findings are based on very small samples, which limits generalizability. To remedy this shortcoming, Sampson and Groves (1989) use survey data from 238 communities in Great Britain to investigate whether indicators of systemic social organization (e.g., friendship ties, organizational participation, supervision of peer groups) mediate between community structure (i.e., socioeconomic composition, residential stability, racial/ethnic heterogeneity, and family structure) and crime. Consistent with the systemic social disorganization framework, they find that local friendship networks are higher in communities that are less urbanized and have greater residential stability. Moreover, supervision is higher in wealthier, less urban communities with a high proportion of two-parent families. Organizational participation is highest in high socioeconomic status (SES) communities.

With regard to expected relationships between systemic community organization and crime, Sampson and Groves report generally supportive findings. Strongest support is found for peer group supervision, which has a significant association with all of the crime measures used by Sampson and Groves.

Moreover, although the impact of organizational participation and friendship ties vary by type of crime, each has a significant effect on at least one measure of property and personal crime.

Building on the social ties and crime literature, Bellair (1997) challenges the assumption that frequent forms of social interaction are the most important for social control for two reasons. First, infrequent interaction may signify the presence of an expansive network connecting neighborhood residents. Studies that focus solely on frequent interaction may therefore underestimate the extensiveness of community networks. Second, infrequent interaction may be indicative

of “weak ties,” which are important bridges between insular kin and friendship networks within the community (e.g., see Granovetter 1974). Thus, social networks in communities with few, infrequent social interactions may lack closure, an important aspect of neighborhood organization and social control (see Coleman 1988 for a discussion of closure).

Using data from 60 urban neighborhoods, Bellair (1997) explores whether infrequent social interaction affects crime and whether social interaction mediates part of the oft-reported association between community structure and crime rates. He finds that measures that include *both* frequent and infrequent interactions are the best predictors of burglary, motor vehicle theft, and robbery. Moreover, social interaction mediates part of the impact of socioeconomic status, heterogeneity, and residential stability on crime. Bellair concludes that weak ties (i.e., infrequent social interaction) are a major form of neighborhood organization and make important contributions to the social control of crime.

Although the previously cited evidence suggests that social ties have a crime-reducing effect, Warner and Rountree (1997) question whether that effect is generalizable across neighborhood contexts. In particular, they investigate whether social ties have similar effects on assault rates in predominantly white, predominantly minority (Asian or black), or predominantly mixed-race neighborhoods in Seattle, Washington. Contrary to expectations derived from the systemic social disorganization perspective, they find that social ties have dissimilar effects on assault rates across these neighborhood contexts. In fact, although higher scores on the social ties variable corresponds with lower assault rates in predominantly white neighborhoods, there is no association between social ties and assault rates in predominantly minority and mixed-race neighborhoods. Based on these findings, Warner and Rountree conclude that the systemic social disorganization model may apply only in white middle-class communities.

The notion that social ties may not hinder crime in certain community contexts is evident in Pattillo’s (1998) ethnographic study of a black middle-class neighborhood in Chicago. She finds that dense social networks are composed of both the leaders of legitimate establishments and the heads of criminal organizations involved in drug trafficking, money laundering, and other illicit activities. This integration of licit and illicit networks creates problems for crime control. Because many of the criminals described in Pattillo’s study are longtime community residents who are highly integrated into the social fabric of the community, law-abiding residents are reluctant to report their illicit activities to the police. Therefore, criminal organizations in the community are given some latitude to operate, which increases their chance of success.

While Pattillo's research suggests that private- and parochial-level networks may actually facilitate criminality in certain instances, Rose and Clear (1998) contend that public-level social control (e.g., incarceration) may contribute to crime by reducing informal social control capacity within a community. Assuming that individuals who become incarcerated are making some positive contributions to the community, Rose and Clear suggest that incarceration has a number of negative outcomes. First, it fragments families and reduces capacity to supervise the activities of community youths. Second, to the extent that criminals hold legitimate employment, incarceration reduces the number of employed adults in the community. This has a short-term effect on the economic vitality of the community, and a long-term effect on the connection between community children and the legitimate labor market. Third, communities that experience the frequent incarceration of residents may develop a distrust and fear of the police and legal system, which fragments their connection to the public level of social control.

In addition to social ties, associational networks, and organizational participation, recent research points to two other concepts that mediate between ecological structure and crime. First, Skogan (1990) suggests that *disorder* mediates the effect of economic disadvantage, heterogeneity, and residential instability on crime. Disorder refers to the violation of norms regarding public behavior and includes activities such as public drinking and solicitation of prostitution as well as visual symbols of decay such as abandoned buildings, broken streetlights, and garbage-filled parking lots (Skogan 1990). In an analysis of robbery victimization in 30 neighborhoods, Skogan reports that the effects of poverty, instability, and racial composition on robbery are mediated by disorder. Moreover, Bursik and Grasmick (1993b) suggest that disorder may be an important mediator between the ecological correlates of social disorganization (e.g., poverty, residential instability) and measures of community attachment/informal social control. In other words, poverty, residential instability, and racial heterogeneity may increase disorder, which, in turn, leads to a reduction in social ties and institutional networks within a community. Although Skogan does not test this thesis directly, he does report that disorder has a significant effect on community attachment, as reflected by neighborhood satisfaction and intention to move.

Second, Sampson, Raudenbush, and Earls (1997) suggest that *collective efficacy* may mediate the effects of economic disadvantage, heterogeneity, and population instability on crime. Collective efficacy refers to the degree of "mutual trust . . . and willingness to intervene for the common good" within a community (Sampson, Raudenbush, and Earls 1997, 919). Sampson and colleagues report that concentrated economic disadvantage, immigration concentration, and residential stability explain a large share of neighborhood variation in collective efficacy. In turn, collective efficacy mediates a substantial part of

the effect of disadvantage and residential stability on measures of violence. Finally, they find that collective efficacy has an independent effect on crime when social ties, organizational participation, and neighborhood services are controlled. In fact, they report that collective efficacy has a stronger effect on crime than these other measures of informal social control.

Summary of findings from the neighborhood crime literature

- Research that examines predictions from the classic social disorganization model shows they are generally supportive. Poverty, residential instability, and heterogeneity are associated with higher crime rates in some previous neighborhood studies.
- The ecological correlates of social disorganization (i.e., low SES, residential instability, ethnic heterogeneity) appear to have multiplicative, rather than additive, effects on crime. In particular, research suggests that the impact of poverty on assault, robbery, and burglary is greatest in stable and homogeneous neighborhoods.
- The integration of social disorganization theory and the systemic model of community attachment represents a crucial step forward in the development of macrolevel social control theory.
- Although the body of research on the systemic social disorganization model is relatively small, it generally supports the expectation that social ties, organizational participation, and supervisory behavior reduce crime and delinquency.
- Contrary to common beliefs, infrequent social interactions between neighbors appear to be as important for crime control as frequent social interactions.
- Although social ties between neighborhood residents have been shown to have a general constraining effect on crime rates, recent evidence suggests that the constraining effect depends on the racial composition of neighborhoods. In predominantly white communities, social ties impede criminal activity, but in predominantly minority and mixed-race communities, social ties have no significant constraining effects on crime. Moreover, recent ethnographic research suggests that the existence of dense associational networks may actually facilitate criminal activities in certain neighborhood contexts.
- Recent theoretical work suggests that increases in incarceration may actually increase crime in the long run by disrupting informal social control mechanisms in the community. Although plausible, the empirical validity of this hypothesis has yet to be verified.

Discussion

Andre-Michel Guerry's (1833) *Essai sur la statistique morale de la France* was one of the earliest scientific studies of crime. In that work, Guerry concluded that crime rates varied across geographic units. My review of homicide, robbery, and burglary rates in the United States suggests that Guerry's conclusion remains relevant to contemporary America, as serious crime rates continue to show variation by region and size of urban place.

With regard to regional differences, the data indicate that homicide rates are highest in the South, followed by the West, Midwest, and Northeast. However, the South's position atop the regional homicide rankings has become more tenuous over time as homicide rates in the Western States have converged with those of the South over the past 40 years. Robbery rates also exhibit regional differences, but in contrast to homicide rates, the Northeast has the highest robbery rates while the South ranks near the bottom in robbery for most of the period examined. Burglary rates were highest in the West until the late 1980s, when Southern States overtook Western States.

Crime rates also vary by city size. For most of the period studied, homicide and robbery rates show a clear linear association with city size. That is, homicide and robbery rates are highest in large cities (i.e., cities of 1 million or more persons) and decrease with each corresponding step down the city-size continuum. In contrast, burglary rates show little clear pattern of association with city size. For example, burglary rates are highest in medium-sized cities and lowest in small cities.

The most prominent framework for explaining the observed geographic variation in crime is the macrosocial perspective. This general perspective is reflected in several theoretical traditions that attribute aggregate-level variation in crime to differences in culture, social stratification, and social control. The cultural approach has been most common in research on regional variation in homicide rates and is frequently considered a foil for social stratification approaches that argue that regional variation in homicide is due to regional differences in structural poverty. The social stratification tradition is most prominent in the metropolitan area and city literature in which researchers have actively debated the merits of two variants of the social stratification tradition, the absolute and relative deprivation models. Finally, the social control tradition is evident in the metropolitan area and city literature, but the most important classical and contemporary contributions in this area are at the neighborhood level. A summary of findings with regard to each of these theoretical perspectives is presented immediately following the detailed reviews of research previously presented.

Comparative research at multiple levels of analysis: Are findings consistent across units of analysis?

Although the preceding review reveals some support for each theoretical model, it is difficult to directly compare findings across studies framed at different levels of aggregation. Fortunately, however, there have been a small number of studies across multiple units of analysis. The most prominent of these is by Land, McCall, and Cohen (1990), who examine the effects on homicide of structural and "cultural" variables (e.g., resource deprivation, percentage divorced, region) at the State, metropolitan area, and city levels with data for 1970, 1980, and 1990. After reducing problems caused by high correlations between independent variables, they compute regression models at all three units of analysis within each decade. Similarities and differences in the South-region effect were discussed earlier in the paper. With regard to the effects of social stratification (e.g., a resource deprivation index) and social control (percentage divorced) variables, Land and colleagues report consistent findings across units. In fact, both the resource deprivation index and the percentage divorced have significant positive associations with homicide rates at the city, metropolitan area, and State levels in 1960, 1970, and 1980.

First, future research needs to explain the substantial decline in crime rates occurring throughout most of the 1990s. If social stratification and social control models best explain the crime increases of the 1960s and 1970s, do they also account for the crime declines observed in the 1990s?

In an extension of the previously mentioned research, McCall, Land, and Cohen (1992) examine the effects of the same set of predictors used in Land, McCall, and Cohen (1990) on rape, robbery, and aggravated assault rates across units of analysis and time. Although findings for these other dimensions of criminal violence are less uniform than those observed for homicide, they are impressive nonetheless. Remarkably, the percentage divorced has a significant positive association with rape, robbery, and assault rates at all three units of analysis in each decade. Meanwhile, resource deprivation has a significant positive effect in seven of the nine equations estimated for each violent crime type. In general, the least support for a resource deprivation effect on violence is found at the State level.

These two studies provide rather compelling evidence in support of the generalizability of stratification and social control effects across units of analysis and time. Based on these findings, it is tempting to conclude that choice of unit of

analysis (especially between metropolitan area and city) has little impact on substantive findings regarding the effects of structural variables on crime. However, recent research by Miethe and Meier (1994) suggests that such a conclusion is premature. They estimate the effects of stratification (e.g., family income) and social disorganization (e.g., heterogeneity, mobility, intact families) theory variables on each of the Index crimes at the metropolitan area, city, and census tract levels and report greater divergence than is found by Land and colleagues. In none of the instances is there a similar significant effect of the stratification or social disorganization variables on crime across all three units of analysis.⁵ Given these results, it is evident that although some convergence in findings across units of analysis is indicated, more research is needed before definite conclusions can be reached.

Directions for future research

Given limitations on time and space, the research reviewed in this chapter is confined to a few prominent lines of inquiry on regional and urban variations in crime. Nevertheless, there are many avenues that may be pursued in future research. First, future research needs to explain the substantial decline in crime rates occurring throughout most of the 1990s. If social stratification and social control models best explain the crime increases of the 1960s and 1970s, do they also account for the crime declines observed in the 1990s? At first glance, the evidence is not overwhelmingly supportive. Although some evidence suggests that the economy is currently strong, indicators of poverty and income inequality have not shown the same monotonic downward trend that would match recent decreases in crime rates. Moreover, rates of single parenthood have generally increased in recent years. Thus, on the surface at least, the link between social stratification and informal social control variables and recent drops in serious crime appears tenuous. However, to adequately answer this question, systematic study is required.

Second, the preceding review reveals that there have been relatively few longitudinal studies that examine the impact of cultural and structural variables on regional and urban variation in crime. However, with the coming availability of the 2000 census data, the opportunity for panel studies that span five decades or more will become a reality. Analyses that utilize these data with a longitudinal research design will be helpful in determining whether change in ecological structure affects change in crime, an issue that is central to many versions of macrolevel social control theory. Moreover, as the research by Land, McCall, and Cohen (1990) illustrates, studies that make use of multiple “waves” of data to examine the stability of structural and cultural effects over time and space are useful for reconciling inconsistent findings, detecting “period effects,” and providing more robust tests of theory.

Third, the increasing availability of time-series, panel, and multilevel data, along with recent developments in multilevel and growth-curve methodology, presents macrolevel researchers with many exciting opportunities. For example, it provides the opportunity to explore how between-city differences in stratification and social control variables are related to city crime trajectories (e.g., see Baumer et al. 1998). It also allows the possibility of investigating whether the effects of neighborhood-level economic conditions (e.g., poverty, inequality, joblessness) on crime depend on the broader economic context of cities or urban areas (e.g., a city in industrial decline or a postindustrial, high-tech service city).

Fourth, the increasing availability of international data will enable researchers to examine whether structural conditions have similar effects on subnational crime rates in other industrialized nations (e.g., Japan, Germany, Australia). Results from these studies will either support the generalizability of social stratification and social control models or suggest directions for future research.

Fifth, although research in the criminal opportunity/routine activities/lifestyles tradition was not reviewed in this chapter, recent research (e.g., Miethe and Meier 1994) suggests that theories of social stratification, social control, and opportunity complement each other and together provide a more comprehensive explanation of crime than any of these three perspectives do alone. Additional work that explores whether or not these three perspectives have interactive effects on aggregate-level crime rates would further add to our knowledge about how structural variables affect regional and urban variation in crime.

Sixth, building on the research strategies of Land, McCall, and Cohen (1990) and Miethe and Meier (1994), future research should directly compare the applicability of structural models for explaining crime rates in aggregate units across the urban-rural continuum. For example, although some authors have analyzed crime rates across suburban (e.g., see Liska, Logan, and Bellair 1998) and rural areas (for a review, see Weisheit and Donnermeyer in this volume), few studies have directly compared findings across various units along the urban-rural continuum.

Seventh, additional research on variation in race- and gender-specific crime rates in aggregate units is needed. As race-disaggregated research has shown, structural models do not apply equally well for all race groups (see Harer and Steffensmeier 1992; Smith 1992; Ousey 1999). Thus, researchers should investigate reasons for racial variability in effects. Ousey (1999) speculates that perhaps cultural differences account for the weaker effects of structure on homicide, but provides no empirical evidence in support of this speculation. Is institutional racism a contributing factor? If so, how do we measure it with aggregate data?

Finally, additional research on regional differences in crimes other than homicide is needed. For example, why has the Northeast had the highest robbery rates since the mid-1960s? Is there a culture of robbery in the Northeast? Or is there something unique in the ecological structure of northeastern cities that leads to higher robbery rates? These issues are important but have been largely ignored in previous macrolevel research on regional crime differences.

Notes

1. Data from the entire 1960–97 period are used to compute all graphs. However, for clarity of presentation, 3-year moving average rates are used in the graphs of homicide, robbery, and burglary trend lines. Consequently, the first (1960) and last (1997) data points are “lost” in the averaging method.

2. Aggregate data on cities by size category were taken directly from annual published volumes of the FBI’s *Crime in the United States*. The FBI classifies cities into each category on an annual basis based on U.S. Bureau of the Census population estimates.

3. The term “serious crime,” as used here, refers to the seven Index crimes (homicide, robbery, rape, assault, burglary, larceny-theft, auto-theft) that constitute the total Crime Index reported by the FBI.

4. Bailey (1984) argues that Messner’s anomalous findings are a product of using aggregate units (SMSAs) that ignore theoretically relevant variations in crime and its macrosocial correlates. He advocates the use of less diverse aggregate units and uses cities in his own analysis. Williams (1984) criticizes the Blaus and Messner for incorrectly specifying the relationship between poverty and homicide as linear. He argues that poverty and homicide have a nonlinear relationship, which he specifies by taking the log (base 10) of both variables. Loftin and Parker (1985) suggest that measurement error in the operationalization of poverty biases the estimate of the poverty effect in the research by the Blaus and Messner. To eliminate this problem, they employ an instrumental variable estimator using the infant mortality rate as the instrument for poverty. Unlike poverty, this instrument is uncorrelated with the disturbance term in their regression equation. Therefore, the instrumental variable estimator yields more consistent estimates than the ordinary least squares regression models specified by the Blaus and Messner.

5. No measure of residential mobility is included in their metropolitan area regression models. Thus, comparison of effects for this variable across all three levels is not possible. For three of the seven Index crimes, residential mobility has a significant positive effect on the dependent variable at both the city and census tract levels.

References

- Bailey, William C. 1984. Poverty, inequality, and city homicide rates: Some not so unexpected findings. *Criminology* 22:531–550.
- Balkwell, James W. 1990. Ethnic inequality and the rate of homicide. *Social Forces* 69:53–70.
- Baumer, Eric. 1994. Poverty, crack, and crime: A cross-city analysis. *Journal of Research in Crime and Delinquency* 31:311–327.
- Baumer, Eric, Janet L. Lauritsen, Richard Rosenfeld, and Richard Wright. 1998. The influence of crack cocaine on robbery, burglary, and homicide rates. A cross-city, longitudinal analysis. *Journal of Research in Crime and Delinquency* 35:316–340.
- Bellair, Paul E. 1997. Social interaction and community crime: Examining the importance of neighbor networks. *Criminology* 35:677–703.
- Blau, Judith R., and Peter M. Blau. 1982. The cost of inequality: Metropolitan structure and violent crime. *American Sociological Review* 47:114–129.
- Blau, Peter M., and Reid M. Golden. 1986. Metropolitan structure and criminal violence. *Sociological Quarterly* 27:15–26.
- Bloom, B. 1966. A census tract analysis of socially deviant behaviors. *Multivariate Behavioral Research* 1:307–320.
- Blumstein, Alfred. 1995. Youth violence, guns, and the illicit-drug industry. *Journal of Criminal Law and Criminology* 86:10–36.
- Bonger, Willem. 1916. *Criminality and economic conditions*. Boston: Little, Brown and Company.
- Braithwaite, John. 1979. *Inequality, crime, and public policy*. London: Routledge & Kegan Paul.
- Brearely, H.C. 1932. *Homicide in the United States*. Chapel Hill: University of North Carolina Press.
- Bruce, Dickson D., Jr. 1979. *Violence and culture of the antebellum South*. Austin: University of Texas Press.
- Bursik, Robert J., Jr. 1988. Social disorganization and theories of crime and delinquency: Problems and prospects. *Criminology* 26:519–551.
- Bursik, Robert J., Jr., and Harold G. Grasmick. 1993a. Economic deprivation and neighborhood crime rates, 1960–1980. *Law and Society Review* 27:263–283.

- . 1993b. *Neighborhoods and crime: The dimensions of effective community control*. New York: Lexington Books.
- Bursik, Robert J., Jr., and Jim Webb. 1982. Community change and patterns of delinquency. *American Journal of Sociology* 88:24–42.
- Byrne, James M., and Robert J. Sampson, eds. 1986. *The social ecology of crime*. New York: Springer-Verlag.
- Cash, W.J. 1941. *The mind of the South*. New York: Knopf.
- Chamlin, Mitchell B. 1989. A macro social analysis of the change in robbery and homicide rates: Controlling for static and dynamic effects. *Sociological Focus* 22:275–286.
- Chamlin, Mitchell B., and John K. Cochran. 1997. Social altruism and crime. *Criminology* 35:203–227.
- Chilton, Roland. 1964. Continuities in delinquency area research: A comparison of studies for Baltimore, Detroit, and Indianapolis. *American Sociological Review* 29:71–83.
- Cohen, Albert K. 1955. *Delinquent boys: The culture of the gang*. Glencoe, Illinois: Free Press.
- Coleman, James S. 1988. Social capital in the creation of human capital. *American Journal of Sociology* 94:95–120.
- Corzine, Jay, and Lin Huff-Corzine. 1992. Racial inequality and black homicide: An analysis of felony, nonfelony, and total rates. *Journal of Contemporary Criminal Justice* 8:150–165.
- Crutchfield, Robert D., Michael R. Geerken, and Walter R. Gove. 1982. Crime rate and social integration: The impact of metropolitan mobility. *Criminology* 20:467–478.
- DeFronzo, James. 1983. Economic assistance to impoverished Americans. *Criminology* 21:119–136.
- Doerner, William G. 1976. The index of Southernness revisited: The influence of wherefrom upon whodunnit. *Criminology* 16:47–56.
- Durkheim, Emile. 1897. *Suicide: A sociological study*. New York: Free Press.
- Erlanger, H.S. 1976. Is there a “subculture of violence” in the South? *Journal of Criminal Law and Criminology* 66:483–490.
- Fowles, Richard, and Mary Merva. 1996. Wage inequality and criminal activity: An extreme bounds analysis for the United States, 1975–1990. *Criminology* 34:163–182.
- Gastil, Raymond D. 1971. Homicide and a regional culture of violence. *American Sociological Review* 36:412–427.

- Geerken, Michael R., and Walter R. Gove. 1977. Deterrence, overload, and incapacitation: An evaluation of three explanations of the negative correlation between crime and punishment. *Social Forces* 56:424–447.
- Gelles, Richard J., and Ann Levine. 1999. *Sociology: An introduction*. 6th ed. New York: McGraw-Hill.
- Golden, Reid M., and Steven F. Messner. 1987. Dimensions of racial inequality and rates of violent crime. *Criminology* 25:525–541.
- Granovetter, Mark. 1974. The strength of weak ties. *American Journal of Sociology* 78:1360–1380.
- Greenberg, David F., Ronald C. Kessler, and Charles H. Logan. 1979. A panel model of crime rates and arrest rates. *American Sociological Review* 44:843–850.
- Greenberg, Stephanie W., William Rohe, and Jay R. Williams. 1982. *Safe and secure neighborhoods: Physical characteristics and informal territorial control in high and low crime neighborhoods*. Research Report, NCJ 81044. Washington, D.C.: U.S. Department of Justice, National Institute of Justice.
- Guerry, Andre-Michel. 1833. *Essai sur la statistique morale de la France*. Paris: Chez Crochard.
- Hackney, Sheldon. 1969. Southern violence. *American Historical Review* 39:906–925.
- Harer, Miles D., and Darrell Steffensmeier. 1992. The different effects of economic inequality on black and white rates of violence. *Social Forces* 70:1035–1054.
- Hoffman, Frederick. 1925. *The homicide problem*. Newark, New Jersey: Prudential Press.
- Huff-Corzine, Lin, Jay Corzine, and David C. Moore. 1986. Southern exposure: Deciphering the South's influence on homicide rates. *Social Forces* 64:906–924.
- Hunter, Albert J. 1985. Private, parochial, and public school orders: The problem of crime and incivility in urban communities. In *The challenge of control: Citizenship and institution building in modern society*, edited by Gerald Suttles and Mayer N. Zald. Norwood, New Jersey: Ablex Publishing.
- Jackson, Pamela Irving. 1984. Opportunity and crime: A function of city size. *Social Science Review* 68:172–193.
- Kapsis, Robert E. 1978. Residential succession and delinquency. *Criminology* 15:459–486.
- . 1976. Continuities in delinquency and riot patterns in black residential areas. *Social Problems* 23:567–580.

- Kasarda, John D., and Morris Janowitz. 1974. Community attachment in mass society. *American Sociological Review* 39:328–339.
- Kovandzic, Tomislav, Lynne M. Vieraitis, and Mark R. Yeisley. 1998. The structural covariates of urban homicide: Reassessing the impact of income inequality and poverty in the post-Reagan era. *Criminology* 36:569–599.
- Land, Kenneth C., Patricia L. McCall, and Lawrence E. Cohen. 1990. Structural covariates of homicide rates: Are there any invariances across time and social space?" *American Journal of Sociology* 95:922–963.
- Lander, Bernhard. 1954. *Toward an understanding of juvenile delinquency*. New York: Columbia University Press.
- Liska, Allen E., John R. Logan, and Paul E. Bellair. 1998. Race and violent crime in the suburbs. *American Sociological Review* 63:27–38.
- Loftin, Colin, and Robert H. Hill. 1974. Regional subculture and homicide: An examination of the Gastil-Hackney thesis. *American Sociological Review* 39:714–724.
- Loftin, Colin, and Robert Nash Parker. 1985. An errors-in-variable model of the effect of poverty on urban homicide rates. *Criminology* 23:269–287.
- Lottier, S. 1938. Distribution of criminal offenses in sectional regions. *Journal of Criminal Law and Criminology* 29:329–344.
- Maccoby, Eleanor E., Joseph P. Johnson, and Russell M. Church. 1958. Community integration and the social control of juvenile delinquency. *Journal of Social Issues* 14:38–51.
- Massey, Douglas S. 1990. American apartheid: Segregation and the making of the underclass. *American Journal of Sociology* 96:329–357.
- Massey, Douglas S., and Nancy A. Denton. 1993. *American apartheid: Segregation and the making of the underclass*. Cambridge: Harvard University Press.
- McCall, Patricia L., Kenneth C. Land, and Lawrence E. Cohen. 1992. Violent criminal behavior: Is there a general and continuing influence of the South? *Social Science Research* 21:286–310.
- Merton, Robert. 1938. Social structure and anomie. *American Sociological Review* 3:672–682.
- Messner, Steven F. 1983a. Regional and race effects on the urban homicide rate: The subculture of violence revisited. *American Journal of Sociology* 88:997–1007.
- . 1983b. Regional differences in the economic correlates of the urban homicide rate: Some evidence on the importance of cultural context. *Criminology* 21:477–488.

———. 1982. Poverty, inequality, and the urban homicide rate. *Criminology* 20:103–114.

Messner, Steven F., and Reid M. Golden. 1992. Racial inequality and racially disaggregated homicide rates: An assessment of alternative theoretical explanations. *Criminology* 30:421–447.

Messner, Steven F., and Scott J. South. 1986. Economic deprivation, opportunity structure, and robbery victimization: Intra- and interracial patterns. *Social Forces* 64:975–991.

Miethe, Terance D., Michael Hughes, and David McDowall. 1991. Social change and crime rates: An evaluation of alternative theoretical approaches. *Social Forces* 70:165–185.

Miethe, Terance D., and Robert F. Meier. 1994. *Crime and its social context*. Albany: State University of New York Press.

Miller, Walter B. 1958. Lower class culture as a generating milieu of gang delinquency. *Journal of Social Issues* 14:5–19.

Nelsen, Candice, Jay Corzine, and Lin Huff-Corzine. 1994. The violent West reexamined: A research note on regional homicide rates. *Criminology* 32:149–161.

O'Carroll, Patrick W., and James A. Mercy. 1989. Regional variation in homicide rates: Why is the West so violent? *Violence and Victims* 4:17–25.

Ousey, Graham C. 1999. Homicide, structural factors, and the racial invariance assumption. *Criminology* 37:405–426.

Park, Robert, Ernest W. Burgess, and R.D. McKenzie. 1925. *The city*. Chicago: University of Chicago Press.

Parker, Karen F., and Patricia L. McCall. 1997. Adding another piece to the inequality-homicide puzzle. *Homicide Studies* 1:35–60.

Parker, Robert Nash. 1989. Poverty, subculture of violence, and type of homicide. *Social Forces* 67:983–1007.

Pattillo, Mary E. 1998. Sweet mothers and gangbangers: Managing crime in a black middle-class neighborhood. *Social Forces* 76:747–774.

Petee, Thomas A., and Gregory S. Kowalski. 1993. Modeling rural violent crime rates: A test of social disorganization theory. *Sociological Focus* 26:87–89.

Peterson, Ruth D., and William C. Bailey. 1988. Forcible, rape, poverty, and economic inequality in U.S. metropolitan communities. *Journal of Quantitative Criminology* 4:99–119.

- Peterson, Ruth D., and Lauren J. Krivo. 1993. Racial segregation and urban black homicide rates. *Social Forces* 59:136–147.
- Phillips, Julie A. 1997. Variation in African-American homicide rates: An assessment of potential explanations. *Criminology* 35:527–560.
- Porterfield, A.L. 1949. Indices of suicide and homicide in States and cities: Some Southern-non-Southern contrasts with implications for research. *American Sociological Review* 14:481–490.
- Quinney, Richard. 1974. *Critique of the legal order*. Boston: Little, Brown and Company.
- Redfield, H.V. 1880. *Homicide, North and South*. Philadelphia: J.B. Lippincott.
- Reed, John S. 1982. *One South: An ethnic approach to regional culture*. Baton Rouge: Louisiana State University Press.
- Rose, Dina R., and Todd R. Clear. 1998. Incarceration, social capital, and crime: Implications for social disorganization theory. *Criminology* 36:441–479.
- Rosenfeld, Richard. 1986. Urban crime rates: Effects of inequality, welfare dependency, region, and race. In *The social ecology of crime*, edited by James M. Byrne and Robert J. Sampson. New York: Springer-Verlag.
- Sampson, Robert J. 1987a. Urban black violence: The effects of male joblessness and family disruption. *American Journal of Sociology* 93:348–382.
- . 1987b. Communities and crime. In *Positive criminology*, edited by Michael R. Gottfredson and Travis Hirschi. Beverly Hills: Sage Publications.
- . 1986. Crime in cities: The effects of formal and informal social control. In *Communities and crime*, edited by Albert J. Reiss, Jr., and Michael Tonry. Vol. 8 of *Crime and justice: A review of research*. Chicago: University of Chicago Press.
- . 1985. Race and criminal violence: A demographically disaggregated analysis of urban homicide. *Crime & Delinquency* 31:47–82.
- Sampson, Robert J., and W. Byron Groves. 1989. Community structure and crime: Testing social-disorganization theory. *American Journal of Sociology* 94:774–802.
- Sampson, Robert J., Stephen W. Raudenbush, and Felton Earls. 1997. Neighborhoods and violent crime: A multilevel study of collective efficacy. *Science* 277:918–924.
- Sampson, Robert J., and William Julius Wilson. 1995. Toward a theory of race, crime, and urban inequality. In *Crime and inequality*, edited by John Hagan and Ruth D. Peterson. Stanford, California: Stanford University Press.

- Shaw, Clifford R., and Henry McKay. 1942. *Juvenile delinquency in urban areas*. Chicago, Illinois: University of Chicago Press.
- Shaw, Clifford R., Frederick M. Zorbaugh, Henry D. McKay, and Leonard S. Cottrell. 1929. *Delinquency areas*. Chicago: University of Chicago Press.
- Shihadeh, Edward S., and Nicole Flynn. 1996. Segregation and crime: The effect of black social isolation on the rates of black urban violence. *Social Forces* 74:1325–1353.
- Shihadeh, Edward S., and Michael O. Maume. 1997. Segregation and crime: The relationship between black centralization and urban black homicide. *Homicide Studies* 1:254–280.
- Shihadeh, Edward S., and Graham C. Ousey. 1998. Industrial restructuring and violence: The link between entry-level jobs, economic deprivation, and black and white homicide. *Social Forces* 77:185–206.
- . 1996. Metropolitan expansion and black social dislocation: The link between suburbanization and center-city crime. *Social Forces* 75:649–666.
- Shihadeh, Edward S., and Darrell J. Steffensmeier. 1994. Economic inequality, family disruption, and urban black violence: Cities as units of stratification and social control. *Social Forces* 73:729–751.
- Simcha-Fagan, Ora, and Joseph E. Schwartz. 1986. Neighborhood and delinquency: An assessment of contextual effects. *Criminology* 24:667–704.
- Simpson, Miles E. 1985. Violent crime, income inequality, and regional culture: Another look. *Sociological Focus* 18:199–208.
- Skogan, Wesley. 1990. *Disorder and decline: Crime and the spiral of decay in American neighborhoods*. New York: Free Press.
- Smith, Douglas A., and G. Roger Jarjoura. 1988. Social structure and criminal victimization. *Journal of Research in Crime and Delinquency* 25:27–52.
- Smith, M. Dwayne. 1992. Variations in correlates of race-specific urban homicide rates. *Journal of Contemporary Criminal Justice* 8:137–149.
- Smith, M. Dwayne, and Robert Nash Parker. 1980. Type of homicide and variation in regional rates. *Social Forces* 39:136–147.
- Taylor, Ralph B., and Jeanette Covington. 1988. Neighborhood changes in ecology and violence. *Criminology* 26:553–589.
- Taylor, Ralph B., Stephen Gottfredson, and Sidney Brower. 1984. Block crime and fear: Defensible space, local social ties, and territorial functioning. *Journal of Research in Crime and Delinquency* 21:303–331.

Thomas, William I., and Florian Znaniecki. 1920. *The Polish peasant in Europe and America*. Vol. 4. Boston: Gorham Press.

Tittle, Charles R., and Allan R. Rowe. 1974. Certainty of arrest and crime rates: A further test of the deterrence hypothesis. *Social Forces* 52:455–462.

U.S. Bureau of the Census. 1991. *Census of population and housing, 1990: Summary tape file 3* [machine-readable data files]. Washington, D.C.

U.S. Department of Justice, Federal Bureau of Investigation. 1960–97. *Crime in the United States*. Uniform Crime Reports. Washington, D.C.

Warner, Barbara D., and Glenn L. Pierce. 1993. Re-examining social disorganization theory using calls to the police as a measure of crime. *Criminology* 31:493–517.

Warner, Barbara D., and Pamela Wilcox Rountree. 1997. Local social ties in a community and crime model: Questioning the systemic nature of informal social control. *Social Problems* 44:520–536.

Williams, Kirk R. 1984. Economic sources of homicide: Reestimating the effects of poverty and inequality. *American Sociological Review* 49:283–289.

Williams, Kirk R., and Robert L. Flewelling. 1988. The social production of criminal homicide: A comparative study of disaggregated rates in American cities. *American Sociological Review* 53:421–431.

Wilson, William Julius. 1987. *The truly disadvantaged: The inner city, the underclass, and public policy*. Chicago: University of Chicago Press.

Wolfgang, Marvin E., and Franco Ferracuti. 1967. *The subculture of violence*. London: Tavistock.

Change and Continuity in Crime in Rural America

by Ralph A. Weisheit and Joseph F. Donnermeyer

The study of rural crime has the potential to make important contributions to crime policy, criminological theory, and research methods in criminology. Although most places in America remain rural, researchers have paid insufficient attention to rural crime and have not utilized the wide variations among rural areas as natural laboratories for research. This chapter outlines what is known about rural crime and suggests likely rural crime issues for the future. Understanding rural crime requires understanding factors that make rural life distinct from urban life, including geography and culture. Understanding rural crime and anticipating future rural crime issues also requires understanding how technology, economic factors, and demographics shape the nature of rural crime. Official police data and victimization data are used to examine the levels of rural crime and to compare patterns of rural and urban crime. A variety of sources are used to examine substance abuse and domestic violence, two types of crime that appear to have similar rates across rural and urban areas. The chapter also focuses on the emerging issue of environmental crime in rural areas. And, despite the importance of race in urban studies of crime, little rural crime research has directly addressed links between race and crime.

Dr. Ralph A. Weisheit is a Professor in the Department of Criminal Justice, Illinois State University in Normal. Dr. Joseph F. Donnermeyer is a Professor in the Department of Human and Community Resources Development at The Ohio State University in Columbus.

Two popular yet seemingly contradictory images of American society persist. In one the world is shrinking. The rapid movement of people and goods through the emergence of a world economy, combined with nearly instantaneous communication, has allowed for an unprecedented exchange of cultural ideas across long distances. Fast food chains, franchise stores, television, the Internet, and improved transportation have led to the homogenization or “massification” of American culture (e.g., Fischer 1980). The idea that America has become a mass society, combined with population growth and a highly mobile population, suggests that “rural” is vanishing in both spacial and cultural terms.

A second view sees an American society of growing diversity. Ironically, diversity is stimulated by three of the forces cited in support of the mass society view: the global economy, improved transportation, and worldwide communication, each of which continuously brings new people, ideas, and products into the country.

Rural culture survives and thrives in many areas of the United States, despite the forces of massification and diversity. To make the concept of rural useful to criminology, rural places must be viewed as a diverse array of people, places, and cultures that present rich opportunities for contemporary research on crime and the advancement of criminological theory.

There are more than 65 million rural citizens in the United States, though estimates vary depending on which definition of rural is used. This represents approximately one-fourth of the country’s population, more than any single minority group in America and larger than most countries. For example, the total populations of Great Britain and France are about 59 million each, and Italy is home to approximately 58 million people. Rural places account for about 70 percent of the land mass of the United States. And, although most people in the United States live in urban areas, most places are rural.

The concept of rural is also of theoretical importance, particularly for theories using concepts of place and physical space (see Weisheit and Wells 1996). Theories that cannot account for both rural and urban circumstances are *limited in scope*; they may be only theories of urban crime. Furthermore, because there are many more rural places than urban places, and given that the rural places display an incredible variety of cultural, economic, and social conditions, theories that do not account for variation in structural conditions of rural (and urban) places lack generalizability. This is a particular problem if they are treated as general theories by policymakers.

Urban-based explanations of crime are also inadequate if they are based on faulty assumptions about factors associated with crime. For example, the assumption that the availability of guns fuels high crime rates is inconsistent with the experience of rural areas, in which gun ownership is common and yet guns are *less often* used in homicides, rapes, or robberies than in the largest cities (Weisheit, Falcone, and Wells 1999). Including rural settings in an analysis of the role of guns in crime requires a different and substantially more complex explanatory framework for understanding the relationship between guns and crime.

Theories that cannot account for both rural and urban circumstances are limited in scope; they may be only theories of urban crime.

What Is Rural?

As a concept, rural defies simple definition. The term has been used to describe unincorporated areas, villages, small towns, townships, counties, States, and even countries. It is sometimes used to describe a geographic area, while at other times it refers to a culture or worldview. In other circumstances, the term refers to areas in which the local economy is based on agriculture, mining, logging, and other extractive industries, and some rural tourist communities may have small permanent populations that swell to urban proportions during tourist season.

The broad use of the term rural is also common in research. Most studies of rural crime do not provide an operational definition of the term rural (Weisheit, Falcone, and Wells 1999). In fact, there is no single simple definition that captures the essence of rural, is quantifiable, and is applicable to a variety of rural settings. This chapter reflects the various ways in which the term rural has been employed. The most commonly used operational definitions of rural come from the U.S. Bureau of the Census. For example, for some county-level data the Census Bureau's metropolitan/nonmetropolitan dichotomy provides a crude but serviceable empirical indicator of rural; when discussing community-level issues, the Census Bureau's practice of treating unincorporated areas and towns with less than 2,500 residents as rural is also useful, if imprecise. More recently, places in America have been classified into taxonomies representing a continuum of places from the least to the most densely populated. One example is the U.S. Department of Agriculture's classification of all nonmetropolitan counties into categories based on population size and distance to the nearest metropolitan county. All census-based definitions thus represent rough guides for distinguishing rural from urban.

Another problem with discussing rural crime and culture is the extreme diversity in social, economic, and political conditions across different rural settings. For example, rural Wyoming is very different from rural Delaware in a number of dimensions, including population density, proximity to urban places, composition of the population, and economic base. Thus, wide variations in the cultural, economic, and social conditions of rural (and urban) communities suggest that some rural and urban differences may be situationally specific. The challenge is to capture the essence of rural while also appreciating wide variations among rural areas. When we focus on future trends, our intention is to emphasize broad national and regional patterns that will have direct implications for local problems and local responses.

General Patterns of Rural Crime

There are two stereotypes about rural crime in America. One image is of a bucolic countryside where crime is rare. This stereotype is reflected in television programs such as "The Andy Griffith Show," in which violent crime is practically unknown. Another image is of serious violent crime perpetrated by "rednecks" or "white trash." These individuals, as portrayed in films such as "Deliverance" and "Sling Blade," are amoral, revengeful, and violent. Neither stereotype holds up well under scrutiny. Rural crime does generally occur less frequently than urban crime, but there are important exceptions. Furthermore, there are substantial variations among rural areas in geography, economics, demography, and culture. Consequently, there are wide variations in the levels and forms of crime in rural America. There are, for example, rural pockets with extreme violence and high homicide rates (cf. Angle 1980; Montell 1986), although in general rural homicide rates are much lower than urban rates. Here it is possible only to examine general urban-rural differences. We begin with two national sources of data: the Federal Bureau of Investigation's (FBI's) Uniform Crime Reports (UCR) data and the National Crime Victimization Survey (NCVS).

The belief that crime occurs less frequently in rural areas is supported by recent UCR data (see exhibit 1). Of particular interest is a comparison between police reports of crime in cities of 250,000 people or more and in rural counties that are outside metropolitan statistical areas and cover areas not under the jurisdiction of municipal police departments. Exhibit 1 shows that urban crime rates are higher than rural crime rates for every FBI Crime Index offense. Violent crime rates are especially high in large cities relative to rural counties. The greatest difference is for robbery, which occurs more than 26 times more often in urban areas. In general, the types of crime that are most frequent in large

Exhibit 1. Crime rates (per 100,000) for cities of 250,000 or more versus rural counties, 1997

Violent crime			
Total	1,358.5	251.5	5.4:1
Murder	16.1	4.5	3.6:1
Rape	54.2	25.8	2.1:1
Robbery	533.1	20.5	26.0:1
Aggravated assault	755.2	200.7	3.8:1
Property crime			
Total	6,357.5	2,055.3	3.1:1
Burglary	1,295.5	697.4	1.9:1
Larceny	3,928.9	1,214.3	3.2:1
Vehicle theft	1,133.1	143.6	7.9:1
Arson*	77.8	17.8	4.4:1
* The figures for arson are drawn from table 2.31 of UCR and are not included in the row on total property crime.			
Source: U.S. Department of Justice, Federal Bureau of Investigation 1998, table 16.			

cities are also those that are most frequent in rural areas, with the exception of robbery, which is overwhelmingly an urban crime.

Official counts of crime are useful indicators, but they suffer from a number of shortcomings. Not all crimes are reported to authorities, not all reported crimes are recorded, and not all recorded crimes are forwarded to the FBI's UCR. One alternative is to ask citizens whether they have been victims of crime. NCVS is an annual survey begun in 1973 that uses a randomly drawn national sample and includes information about the size of the respondent's community. The 1990 survey, for example, reported the percentage of households indicating any form of victimization in urban, suburban, and rural areas was 30 percent, 23 percent, and 17 percent, respectively. Bachman (1992a, 1992b) noted that between 1973 and 1990 victimization was consistently highest in central cities and lowest in nonmetropolitan areas.

A few studies have analyzed crime variations among rural areas (e.g., Donnermeyer and Phillips 1982; Miller, Hoiberg, and Ganey 1982; Smith and Huff 1982), generally focusing on patterns across rural areas and correlates of rural crime. Arthur

(1991), for example, examined property and violent crime in 13 rural Georgia counties. He found that unemployment, poverty, public aid, and race were related to both property and violent crime rates; relationships were particularly strong for property crime. Bankston and Allen (1980) compared homicides among 10 social areas in rural Louisiana and found that both socioeconomic and cultural factors shaped homicide rates. Significantly, the relative importance of each varied from one social area to another, suggesting the importance of appreciating variations among rural areas.

Trends in rural crime

An important aspect of anticipating future rural crime patterns is looking at patterns in the recent past. Concern that rural and urban crime rates are converging has raised considerable debate. Exhibit 2 uses UCR data from 1966 through 1997 to compare rural-urban rates over time for both violent and property offenses, and exhibit 3 plots the city to rural crime ratio based on these data. Several things in these exhibits are worth noting. First, violent crime in large cities rose from 1966 through 1991 and then declined, while rural rates drifted upward for the entire period. However, any convergence between urban and rural rates was modest. Between 1991 and 1997, urban rates of violence declined by 531.8 per 100,000 people, while rural rates increased by 37.9 per 100,000. Urban and rural rates were closest in 1997, but violent Index offenses were still five times more frequent in the largest cities and were more the result of declines in urban violence than increases in rural violence. Second, property crime fluctuated over time in both large cities and rural areas, but the overall gap between rural and urban property crime rates changed much less over time than it did for violent crime.

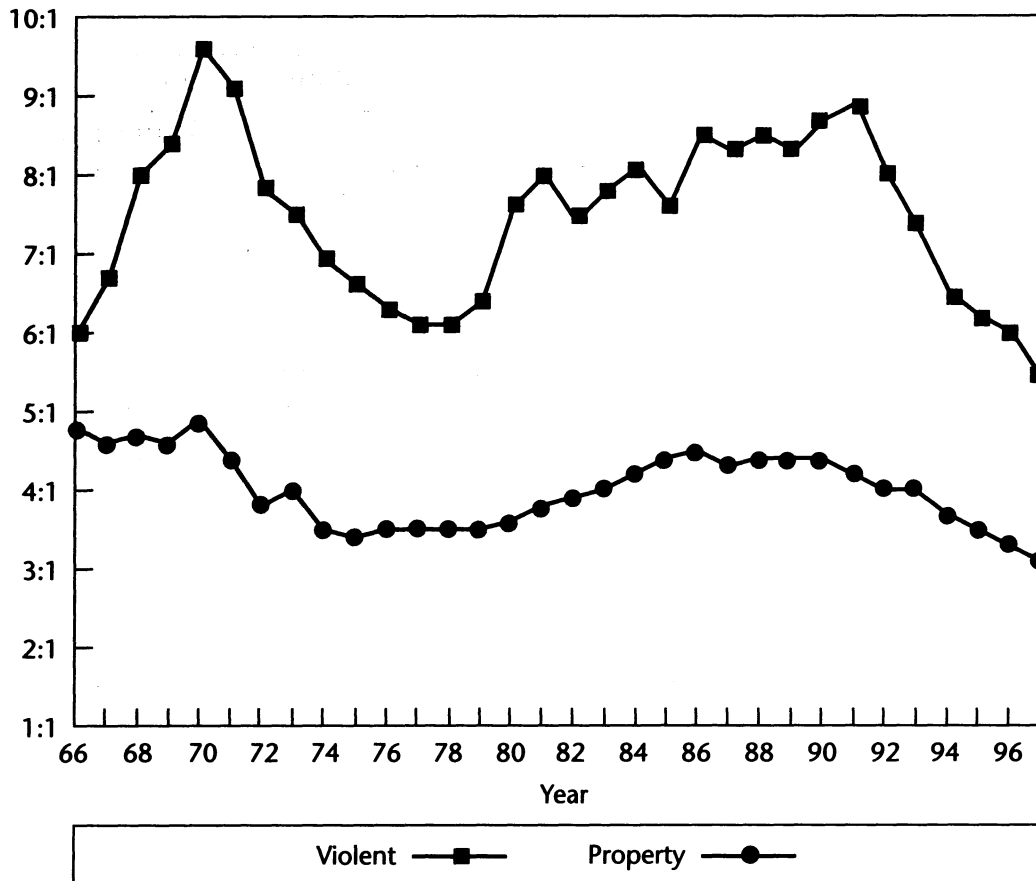
Exhibits 2 and 3 do not cover crimes outside of the seven Index categories. Some offenses, such as youth gang activity, may be of particular concern as emerging issues in rural areas. Non-Index offenses are not reported in UCR by population density, so these comparisons are not possible from published results. Other rural-specific offenses, such as rustling and the theft of grain or farm machinery, are not separated from general crime categories. Exhibit 4 shows that changes are not the same for all offenses. Between 1966 and 1997, rural murder rates changed little, but robbery, burglary, and motor vehicle theft doubled, and rape, aggravated assault, and larceny either tripled or nearly tripled. Among violent crimes, murder changed relatively little over time while rape and aggravated assault both increased. Robbery increased from 1966 through 1974, declined from 1983 through 1990, and then increased between 1990 and 1997. Among property crimes, burglaries increased between 1966 and 1980 and declined between 1980 and 1983, but did not change dramatically after that. Larceny increased between 1966 and 1980, but showed no clear

Exhibit 2. Crime rates for cities of 250,000 or more versus rural counties, 1966-97

Year	Violent crime			Property crime		
	Cities 250,000+*	Rural counties*	City:rural ratio	Cities 250,000+*	Rural counties*	City:rural ratio
1966	505.1	84.5	6.0:1	4,044.0	841.0	4.8:1
1967	626.4	93.0	6.7:1	3,162.5	690.0	4.6:1
1968	773.2	96.5	8.0:1	3,680.2	782.2	4.7:1
1969	859.7	102.9	8.4:1	3,965.0	860.2	4.6:1
1970	980.4	101.9	9.6:1	4,354.7	882.8	4.9:1
1971	1,047.5	115.7	9.1:1	4,366.0	984.0	4.4:1
1972	998.6	128.2	7.8:1	3,949.3	1,026.1	3.8:1
1973	1,003.4	134.0	7.5:1	5,579.5	1,400.2	4.0:1
1974	1,107.9	161.6	6.9:1	6,390.9	1,849.8	3.5:1
1975	1,158.9	176.8	6.6:1	7,043.7	2,052.2	3.4:1
1976	1,095.4	174.2	6.3:1	7,167.1	2,040.7	3.5:1
1977	1,070.4	175.5	6.1:1	6,748.6	1,909.2	3.5:1
1978	1,120.8	185.4	6.1:1	6,760.2	1,950.1	3.5:1
1979	1,237.8	194.0	6.4:1	7,218.1	2,076.1	3.5:1
1980	1,414.2	185.9	7.6:1	7,987.9	2,215.8	3.6:1
1981	1,440.9	179.4	8.0:1	8,030.4	2,119.1	3.8:1
1982	1,353.9	184.2	7.4:1	7,851.0	2,041.2	3.9:1
1983	1,294.0	165.0	7.8:1	7,345.4	1,824.8	4.0:1
1984	1,288.3	159.8	8.1:1	7,307.5	1,740.5	4.2:1
1985	1,344.5	176.9	7.6:1	7,606.1	1,743.8	4.4:1
1986	1,645.5	192.8	8.5:1	7,993.8	1,791.1	4.5:1
1987	1,603.8	193.9	8.3:1	8,062.7	1,887.5	4.3:1
1988	1,540.4	180.7	8.5:1	8,271.3	1,882.3	4.4:1
1989	1,641.1	198.2	8.3:1	8,425.0	1,923.3	4.4:1
1990	1,813.0	209.0	8.7:1	8,361.4	1,923.1	4.4:1
1991	1,890.3	213.6	8.9:1	8,223.0	1,978.0	4.2:1
1992	1,802.1	226.2	8.0:1	7,722.2	1,927.6	4.0:1
1993	1,711.9	233.1	7.3:1	7,492.6	1,883.3	4.0:1
1994	1,657.4	255.9	6.5:1	7,129.0	1,936.5	3.7:1
1995	1,564.3	253.0	6.2:1	6,998.9	2,011.8	3.5:1
1996	1,443.7	242.6	6.0:1	6,647.2	2,014.8	3.3:1
1997	1,358.5	251.5	5.4:1	6,357.5	2,055.3	3.1:1

* Numbers represent the rate of crimes reported per 100,000 people.

Source: U.S. Department of Justice, Federal Bureau of Investigation 1960-97 (see exhibit 1).

Exhibit 3. Ratio of city to rural crime, 1966–97

Source: Based on data presented in exhibit 2, columns 3 and 6.

pattern after that. Motor vehicle theft increased from 1966 through 1980, declined from 1980 through 1985, and then rose from 1985 through 1997.

NCVS also permits considering changes over time by community size and provides an alternative data source in which changes in official recordkeeping are not an issue. Exhibit 5 shows that rural violent victimization is persistently lower than urban violent victimization. Where convergence has occurred, it is between suburban and rural areas. This has more to do with drops in suburban victimization than with increases in rural victimization. Rural crime changed less over time than either suburban or urban crime, with all three showing declines in the most recent years.

Fischer (1980) used data on violent crime in selected California counties to argue that changes in urban counties were followed by changes in rural counties, with crime diffusing first to smaller cities and then to the rural hinterland. This

Exhibit 4. Offense-specific Index crime rates for rural counties, 1966-97

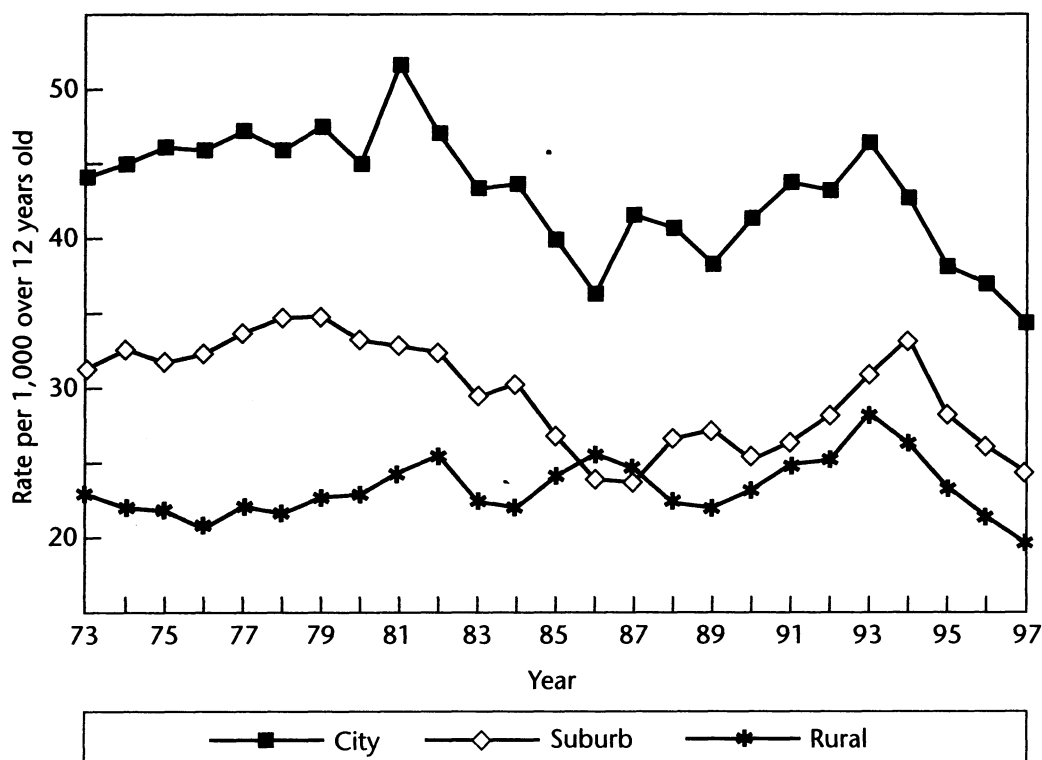
Year	Violent crime				Property crime		
	Murder	Rape	Robbery	Assault	Burglary	Car theft	Larceny
1966	4.7	8.9	10.0	60.9	335.1	445.2	60.7
1967	5.0	9.2	11.5	67.2	403.7	509.3	67.7
1968	5.3	9.7	12.9	68.6	454.6	543.1	75.2
1969	4.9	10.6	13.4	73.9	476.8	595.2	84.4
1970	5.5	9.5	13.3	73.6	477.2	606.1	80.3
1971	5.9	10.7	14.5	84.6	531.6	657.5	76.8
1972	6.2	10.9	16.1	94.9	558.1	667.2	72.5
1973	6.5	11.9	16.7	98.9	594.4	721.2	84.6
1974	7.8	13.1	22.7	118.0	791.6	955.8	102.5
1975	8.4	13.2	24.9	130.4	872.6	1,068.7	110.9
1976	7.5	13.3	20.7	132.6	825.5	1,103.1	112.2
1977	7.9	14.4	20.8	132.4	788.6	999.3	121.2
1978	7.9	14.9	21.4	141.2	795.9	1,021.2	133.0
1979	7.6	15.6	22.8	148.1	803.0	1,130.0	143.1
1980	7.4	16.0	23.0	139.5	871.8	1,202.6	141.4
1981	7.0	15.7	22.1	134.6	836.7	1,157.7	124.7
1982	6.8	15.4	20.4	141.6	788.3	1,132.9	119.9
1983	5.8	15.3	16.9	127.0	693.7	1,027.6	103.6
1984	5.2	17.5	14.9	122.3	651.3	987.1	102.2
1985	5.6	18.5	15.0	137.7	668.2	967.2	108.4
1986	5.4	20.1	15.6	145.4	697.7	978.4	115.1
1987	5.7	19.6	15.6	146.7	728.1	1,040.9	118.5
1988	5.4	19.6	14.8	140.9	711.1	1,051.8	119.4
1989	5.4	22.8	16.4	153.6	719.9	1,077.4	126.0
1990	5.7	23.7	15.8	163.8	708.1	1,087.6	127.4
1991	5.6	25.4	17.0	165.6	741.0	1,114.0	123.0
1992	5.3	27.3	17.0	176.7	701.4	1,109.6	116.6
1993	5.5	26.6	17.1	183.8	675.5	1,087.3	120.5
1994	5.2	28.4	18.6	203.6	679.9	1,127.7	128.8
1995	5.3	26.2	18.6	203.0	687.4	1,186.6	137.8
1996	4.8	24.6	18.0	195.3	680.0	1,196.5	138.3
1997	4.5	25.8	20.5	200.7	697.4	1,214.3	143.6

Note: Numbers represent the rate of crimes reported per 100,000 people.
 Source: U.S. Department of Justice, Federal Bureau of Investigation 1960-97.

argument is consistent with contemporary observations about the rise of gangs in rural areas. Rural gangs are more common in areas adjacent to the largest cities, and even those in more remote rural areas often have ties to gangs in larger communities (Donnermeyer 1994; Weisheit, Falcone, and Wells 1999; Wells and Weisheit 1998). It is not clear which factors facilitate and which hinder this diffusion, or for which types of crime this diffusion process operates.

Our attention now shifts from Index offenses and general crime to several specific offenses. Alcohol, illicit drugs, and domestic violence are general problems in American society. They are also among the crimes for which urban-rural differences are relatively small. Finally, environmental crime is emerging as a serious rural crime issue.

Exhibit 5. Violent victimization, 1973–97



Sources: Thanks to Dr. L. Edward Wells for preparing these data. Because of changes in the instrument, post-1992 rates were adjusted to be comparable to pre-1992 rates. For violent crimes, the multiplier is 0.671 times the post-1993 rates. These data were assembled from a variety of sources, including Bachman 1992a, 1992b; Bastian 1995; Perkins and Klaus 1996; Taylor 1997; Ringel 1997; and Rand, Lynch, and Cantor 1997.

Alcohol and drugs

Rural substance use includes use by rural citizens and criminal trafficking by organizations. The professional literature has discussed the issue of substance use, while the issue of rural trafficking organizations has more often been addressed in the popular press.

Alcohol use is of particular concern in rural areas. Driving under the influence (DUI) for example, is more common in rural areas. According to UCR, the rate of arrest for DUI in cities with fewer than 10,000 residents is more than double that in cities of 250,000 or more, and the rates for both suburban and rural counties are much higher than in the largest cities.

Alcohol remains the drug of choice among American youths, and alcohol use by rural youths has consistently matched or exceeded use by urban youths over more than 20 years of surveying high school seniors. The Monitoring the Future study (Cronk and Sarvela 1997) reported that about 74 percent of both nonmetropolitan and metropolitan youths said they consumed alcohol in the previous year. However, nonmetropolitan youths were more likely to report getting drunk (56.7 percent versus 51.4 percent in 1995). Even if urban and rural rates of alcohol use by young people were similar, the rural setting may be cause for greater concern:

Similar rates of alcohol use, however, may be more of a problem for rural than for urban youth because rural youth must spend more time on the roads. The distances that must be traveled from homes to school and other entertainment events, or even to visit friends, are generally much greater for rural youth than for urban youth. The lack of availability of public transportation means that these youth spend a significant amount of time in cars. Most social use of alcohol by these rural teens is followed by driving or at least riding in a car where the driver has been drinking. The relative lack of traffic on rural roadways and the distances to be traversed often lead to driving at high rates of speed. With many rural roads in poor condition, poorly marked for hazards, and poorly lit, these youth are already at higher risk of accidents leading to injury or death. (Peters, Oetting, and Edwards 1992, 25–26)

The Monitoring the Future study also permits comparisons of substance use across urban and rural areas. In 1975, 39 percent of nonmetropolitan seniors

Alcohol remains the drug of choice among American youths, and alcohol use by rural youths has consistently matched or exceeded use by urban youths over more than 20 years of surveying high school seniors.

had used an illicit substance in the past year, compared with 55 percent of seniors from the largest metropolitan areas and 45 percent from other metropolitan areas. By the peak year of 1979, the rate for nonmetropolitan seniors had risen to 48 percent, compared with 61 percent and 55 percent from the largest metropolitan areas and other metropolitan areas, respectively. By 1992, substance use was 27 percent for all three groups. Thus, urban-rural convergence was due more to a decline in urban rates than to an increase in rural rates. Since 1992, substance use rates have risen more rapidly for metropolitan than for other youths. By 1995, 42 percent of 12th graders from the largest metropolitan counties had tried a substance in the past year, compared with 36 percent of nonmetropolitan youths.

Data from *Monitoring the Future* also indicate that youths from nonmetropolitan counties were consistently more likely than urban youths to use cigarettes and smokeless tobacco. As for other drugs, nonmetropolitan 12th graders in 1995 had similar rates for past year use of inhalants and powder cocaine, and slightly higher rates for crack cocaine, stimulants, barbiturates, and tranquilizers.

Donnermeyer's (1992) summary and analysis of 65 research locality-specific studies of drug use by rural youths concluded that rural and urban rates were similar. He also noted the relative paucity of research on rural drug issues, in particular the lack of information about how rural youths gain access to drugs.

A 1990 report to Congress by the U.S. General Accounting Office concluded that the rate of total drug use, including alcohol, was similar across rural and urban areas, but there were differences in the types of drugs used. Powder cocaine use was lower in rural areas, but the use of inhalants was higher. Furthermore, although total drug arrest rates were similar across areas, alcohol arrests were higher and drug arrests lower in rural areas.

An indirect way of comparing rural and urban drug use is to use arrest statistics. Belyea and Zingraff (1985) compared drug arrest data in North Carolina for urban and rural counties between 1976 and 1980 and concluded that rural arrest rates were consistently lower and that there was no evidence that rural and urban rates were converging. Castellano and Uchida (1990) estimated that the rate of drug arrests in urban areas was nearly four times that in rural counties. They speculated that because most drug enforcement was proactive, variations in arrest rates among jurisdictions were more the result of differences in enforcement efforts than in consumption patterns.

Rural drug trafficking and production are less well understood than is rural drug use. Although there is a tendency to think that the illegal production of alcohol

is a historical curiosity, there are many parts of rural America where illicit alcohol production continues as a lucrative business. In rural Virginia alone, for example, it is estimated that about 500,000 gallons of moonshine are distilled each year, with a street value of \$25 or more per gallon (Verde 1998). Similar problems are likely in other rural States, particularly those with a history of moonshining.

Reports suggest that rural areas may serve as production sites for methamphetamine, designer drugs, crack cocaine, and marijuana (Bai 1997; McCormick and O'Donnell 1993; Weisheit 1993, 1992, 1997; Baker et al. 1989; Weingarten 1989; Clayton 1995; Tyson 1996; Howlett 1997; Kirn 1998; Stewart and Sitaramiah 1997). Weisheit's (1993, 1992) studies of commercial marijuana growers found they were almost exclusively rural operations. Regarding methamphetamine laboratories:

Although an increasing number of these laboratories are confiscated in urban and suburban neighborhoods, the majority are seized in rural sections throughout the country. Because of the chemical odors and toxic wastes associated with the manufacturing process, isolation is often the best defense against detection. Therefore, operators commonly establish their laboratories in sparsely populated areas as a way to conceal their activities while minimizing their risk of discovery. Their operations are typically larger and more sophisticated than laboratories operating in more densely populated communities. (O'Dea, Murphy, and Balzer 1997, 80)

In 1997, the State with the largest number of detected methamphetamine laboratories was Missouri, and most of the laboratories were in rural areas (Stewart and Sitaramiah 1997; Wren 1997).

Other reports argue that rural areas have become important transshipment points for drugs destined for cities (Weingarten and Coates 1989; *Chicago Tribune* 1989). The problem is exacerbated by the improved highway system and by the large number of isolated airstrips set up for corporate farms and crop dusters serving rural farmlands.

Although predicting future patterns of rural substance use and production is difficult, rural drug production will probably become a more serious problem. Opium poppies can easily be grown in rural America. It is unlikely that large-scale production of opium will be possible or economically practical, but there is no reason that small-scale "hobbyists" cannot emerge (cf. Pollan 1997).

Family violence

Although intimate abuse and child abuse have been studied extensively, few studies have focused specifically on rural areas and even fewer have compared urban and rural areas. It appears that rates of abuse are similar across rural and urban areas, but rural areas have fewer resources for responding. In some rural communities, the problem is compounded by a culture that defines family violence as a private matter.

In her observational study of families in a rural Appalachian community, Gagne (1992, 410–412) noted that both the police and the prosecutor were reluctant to act in abuse cases, and as a consequence, women were reluctant to call them for assistance:

Most people I met agreed that police protection in Raven Ridge was inadequate. John explained that it took at least an hour for an officer to arrive after a call was placed, and that once the cruiser arrived, the officers would sit in the car and beep the horn rather than come to the door. . . . Acceptance of a man's authority over his wife and the belief in the sanctity of the home, together with officers' belief that they would be in danger if they responded to domestic calls, resulted in the failure of the legal system to provide protection for physically battered women.

Concern about officer safety is justified in small rural agencies, in which about 60 percent of domestic violence calls are responded to by a single officer unit for whom backup is often far away (Weisheit, Falcone, and Wells 1999).

Websdale's ethnographic study of battered women in Kentucky (1995, 1998) echoed and expanded upon Gagne's observations. Abuse was facilitated by physical isolation, a patriarchal ideology, and isolation from potentially supportive institutions, including child care, health care, schooling, and other social services. Websdale (1998, 5) states:

One of the most common complaints of rural battered women concerns the physical and geographical isolation they experience. Some battered women who live up what is locally called a "hollow" (a secluded dirt road cul-de-sac with a small number of houses on it) seem to live extraordinarily isolated lives. Several of the women report not having any friends for years. With no public transportation and large distances between houses, they report that it is often physically difficult to engage in community life.

The involvement of police in these settings is shaped by their integration into the community. Where the officer is related to or friends with the woman, domestic

violence laws may be aggressively enforced. More commonly, the officer is acquainted with the male batterer or is sympathetic to the batterer's position:

Susan reported that nearly the whole community knew that her husband beat her brutally on a regular basis. However, the local police officer in the small town where they lived in Western Kentucky did not offer her any protection. She told me the local constable was her husband's brother and refused to arrest her husband. Susan also noted it was common knowledge that the constable beat his own wife and confronting domestic violence was not part of his "calling" as a law enforcement officer. (Websdale 1998, 103)

Paradoxically, the more detached the police are from the community, the more likely they are to enforce domestic violence laws. Rural women mentioned that State police are more likely to make arrests, remove men from the home as opposed to removing women from the home, and inform battered women of their rights under the law. (Websdale 1998, 123)

The response of rural police to domestic violence may be changing. In our conversations with rural officers, this issue arose frequently, usually reflecting heightened sensitivity to the issue. It is possible that rural police are increasingly willing to intervene in domestic violence cases—both because research suggests that arrest may be an effective deterrent and out of concern for lawsuits that could result from inaction, as a growing number of States have passed legislation mandating a police response and an arrest in domestic violence calls. However, further study is needed to determine if and how the rural police response is shaped by these legislative initiatives and by changes in the way that domestic violence is perceived. More also needs to be known about how community services available in rural areas shape the responses of the criminal justice system. Most (68 percent) rural agencies report having no shelter for battered women in their jurisdiction, and for those without a shelter, the nearest is an average of 36 miles away (Weisheit, Falcone, and Wells 1999).

Even less is known about rural-urban differences in child abuse, but two studies by the National Center on Child Abuse and Neglect (U.S. Department of Health and Human Services 1981, 1988) are suggestive. The first study was conducted in 1980, the second in 1986. In 1980, abuse was defined as "demonstrated harm as a result of maltreatment" (1988, ix), and in this study, abuse rates were higher

Most (68 percent) rural agencies report having no shelter for battered women in their jurisdiction, and for those without a shelter, the nearest is an average of 36 miles away.

Impoverished rural areas also may be under great financial pressure to serve as legal dumping sites for urban centers, often for other States.

in rural areas than in major urban counties. The 1986 study included a definition of abuse that mirrored that of 1980 but also included children "placed at risk for harm," such as by being left alone. In this study, urban rates of abuse were higher. The studies were based on a relatively small number of counties and could not address contextual issues that would explain these differences. Other research suggests that, compared with doctors in larger cities, physicians in small towns detect more child abuse but are *less* likely to report cases to the authorities (Badger 1989).

Another source of information about both spouse abuse and child abuse is the National Family Violence Survey (NFVS). This self-report national survey was first conducted in 1975 (Straus, Gelles, and Steinmetz 1980) and again in 1985 (Straus and Gelles 1990). Both surveys were designed to include substantial numbers of rural respondents.

The 1975 NFVS found that large cities (with a population of 1 million or more) had the highest rates of child abuse, while rural, suburban, and small city rates were similar. The 1985 survey found no differences in child abuse rates across communities of different sizes (Wolfner and Gelles 1993). Regarding spouse abuse, the 1975 survey found that rates were highest in large cities and rural areas, and lowest in small cities and suburbs. However, the differences were rather small. Curiously, although the 1985 study was designed specifically to include urban, suburban, and rural respondents, the major book describing the 1985 findings (Straus and Gelles 1990) made no mention of differences in spouse abuse by community size.

There is no evidence that child abuse or spouse abuse are increasing in rural areas. There does appear to be a heightened sensitivity to domestic violence and a greater willingness by rural authorities to respond. The challenge for the future will be to provide criminal justice and social services resources, particularly in the most impoverished and remote rural areas.

Environmental crime

An emerging rural issue is ecological crime, including both crimes against the environment and crimes committed in the name of the environment. Ecological crimes are of concern in urban areas, but it is in rural America that such crimes are likely to become particularly problematic.

Crimes against the environment

Crimes against the environment include a range of activities, from the illegal dumping of toxic waste to the illegal harvesting of trees. The extent to which rural areas are used to illegally dump hazardous waste is not known, but the isolation of many rural areas makes such dumping relatively easy. As the problem of disposing of hazardous waste grows and the cost of legally disposing of that waste climbs, illegal dumping in rural areas will likely increase, as will the risk to the health and welfare of rural residents.

Impoverished rural areas also may be under great financial pressure to serve as *legal* dumping sites for urban centers, often for other States (*Rachel's Hazardous Waste News #66* 1988). There are thousands of landfills and similar in-ground storage sites that are contaminated and leaking:

The United States government estimates that over sixteen thousand active landfills have been sopped with industrial and agricultural hazardous wastes. Most are located near small towns and farming communities—and the contents of them, according to the Environmental Protection Agency (EPA), will eventually breach their linings and penetrate the soil, as many already have done. (Setterberg and Shavelson 1993, 4)

A thriving illicit industry is likely to include everything from cleanup scams that defraud rural residents to conducting fraudulent tests for toxins in the ground and water.

With a few important exceptions (Bullard 1994; Bullard and Wright 1993), discussions of “environmental justice” or “environmental victimology” have not generally considered the rural setting, except when including underdeveloped countries (e.g., Perrolle 1993; Williams 1996). This is a serious oversight because both preventing and investigating environmental crimes may be more difficult in rural areas where there may be fewer resources for identifying and responding to problems.

Another environmental crime of particular concern in rural areas is the theft of timber. This crime has been almost completely ignored by researchers, but its economic impact can be immense. In Federal forests alone, it is estimated that timber theft could total as much as \$100 million each year and may account for

In Federal forests alone, it is estimated that timber theft could total as much as \$100 million each year and may account for as many as 1 in 10 trees cut in the National Forest System.

as many as 1 in 10 trees cut in the National Forest System (Public Employees for Environmental Responsibility and the Government Accountability Project 1997; Knickerbocker 1998). Considering that only a small percentage of trees in America grow in national forests, the overall scope of tree theft may be enormous. And, as the value of wood climbs, there is also an emerging problem of the theft of particularly valuable trees. For example, large knotlike growths called burls create beautiful patterns in wood and are therefore particularly valuable. "A raw burl [from a single walnut tree] can sell for \$5,000 or more in California and as much as \$30,000 in Italy on the rare woods market" (Associated Press 1995). Similarly, at the time of a 1997 study, a single cedar tree could bring as much as \$20,000 (Pendleton 1997).

Crimes in the name of the environment

Our interviews with rural police found that concerns about radical environmentalists were more frequently voiced in the West, where efforts to save forests in some instances have involved sabotage and in others threats to loggers and government officials. St. Clair and Cockburn (1997) have reported that the Idaho National Guard considers environmentalists among the groups posing a "hostile threat" to the State of Idaho. Throughout the country, nuclear power plants are generally located in rural areas and would be logical targets for domestic or foreign terrorists.

As the population of the United States continues to grow, sabotage and perhaps even violence will likely erupt over the use of water. Tensions over water are already high in some parts of the West, but the problem can be expected to worsen, as demand will increasingly outstrip supply.

Another likely source of environmental crime will be related to the treatment of animals in modern factory farms. Driven by small profit margins, poultry, beef, and pork producers have built large facilities into which the animals are tightly packed. Animal rights activists have increasingly focused on these large operations, in which the animals may be born and live most of their lives within a few square feet of space. The complaints of animal rights activists and of rural citizens, who object to the smell and the potential for contaminating local water supplies, are increasing in frequency. In one small Iowa town, for example, the issue of mega hog farms has divided the community, with emotions running high on both sides:

The issue has turned meetings here of the county Board of Supervisors into such heated affairs that a panic button was installed so supervisors could summon the sheriff's office. Vandals have struck the construction sites of

some corporate hog complexes. The sheriff's department patrols them, and it tracks their sprawl with pins on its wall map. (Kilman 1995)

Ecoterrorism took yet another turn in October 1998 when an environmental group, the Earth Liberation Front, claimed credit for a fire causing more than \$12 million in damage to a ski resort in Vail, Colorado. The fire was started to prevent the 885-acre expansion of a ski lodge, which the group believed would harm local wildlife (*Chicago Tribune* 1998a, 1998b). Perhaps more surprising than the act itself were the public proclamations of support for the act by spokespersons for several other activist groups.

America's continuous population growth means that the battles over what to do with land and natural resources will become more heated. On one hand is a growing need for the products of industries located in rural areas, such as meat processing and nuclear power, which will produce an increasing volume of hazardous waste that must be disposed of. On the other hand, as the physical size of rural America shrinks, efforts to protect what remains are likely to increase. It is from the clash of these contradictory trends that ecological crimes and civil unrest will emerge and intensify.

Contexts of Rural Crime

Recent scholarly literature on rural crime has stressed its similarity to urban crime, especially in terms of variables that predict deviant behavior (Scheer, Borden, and Donnermeyer in press) and crime rates (Rephann in press). In this chapter, however, we want to stress areas in which unique rural features may influence criminological theory, research, and criminal justice policy. We begin with a discussion of how geography and culture shape rural crime, and then argue that economic factors, demographics, and technology interact with geography and culture to shape crime in rural America.

Geography

Among the first things that come to mind when discussing rural issues are physical distance and isolation. An aggravated assault in a large city may become a murder in the countryside if medical help takes longer to arrive (cf. Doerner 1988). Similarly, the distances involved, combined with the lack of

An aggravated assault in a large city may become a murder in the countryside if medical help takes longer to arrive.

public transportation, may make it difficult for battered women to reach shelters, for victims to get to court to testify, or for offenders to attend drug treatment. Homeowners with alarm systems or the victims of violent crime may find that 911 is not available and that police response times are very slow. As one Midwestern rural sheriff told us, "They [the instructors at the State training academy] always talk about responding to a call within 2 minutes. There are parts of my county that can take an hour to get to by car." Although technology has dramatically improved the transmission of information, it has done less to speed the flow of direct human services.

Physical distance and isolation impact crime in other ways. In some rural areas, it is difficult for neighbors to watch each others' property. Plus, many rural people prefer the privacy of living in the open country with neighbors conveniently far away. Police attempting to organize neighborhood watches and other forms of community-oriented policing may find it more difficult to overcome perceptions that these activities do not apply, are not desired by rural citizens, and would be impractical to implement.

Culture

Precisely measuring and describing culture is difficult, but several features that distinguish rural from urban culture have implications for crime and justice. Among these are informal control, a mistrust of government, and a reluctance to seek outside assistance.

Informal control

There is evidence that, compared with urban areas, rural areas are more governed by informal social control. For example, Gardner and Shoemaker (1989) found that social bonding was more important in protecting against rural than urban delinquency. Smith (1980) found that in rural areas shoplifting and employee theft were rarely reported to the police. Instead, most cases were handled informally. One rural criminal justice official told Smith:

I simply can't get people to tell me things. I hear about them two or three weeks later, and when I ask them why they didn't come to me about it, they say, "Oh, I took care of it myself." We simply can't get people to take advantage of the services of this office. (p. 52)

Informal control is facilitated by the fact that many residents of rural communities, including the local police, know each other socially:

Everyone "knows everyone else" in small towns. Life there revolves around a core of social institutions: family, community, school, and church.

Kin, neighbors, and friends meet one another at work, at church, on Main Street, at school, or leisure activities such as high school basketball games. Daily life thus takes place among a cast of familiars whose social networks are overlapping rather than segmented. (Salamon 1997, 172)

Contributing to the familiarity of residents in many rural communities is the relative stability of the local population. Rural citizens less frequently change addresses, often staying in the same county or even the same house for several generations. Low levels of mobility and population density mean that rural police are likely to know most offenders and their families personally. If victims can identify thieves, for example, sheriffs are likely to know where to find offenders and to already know quite a bit about them.

The term “density of acquaintanceship” has been used to describe the extent to which people in a community know one another. In general, smaller communities are more likely to have a higher density of acquaintanceship. Freudenburg (1986) studied four small towns in Colorado and found that residents of communities higher in density of acquaintanceship less often reported being the victims of crime. They were also half as likely to believe it was necessary to lock their doors when they left home for a few hours or less, and they were five times less likely to believe it necessary to lock their doors when they were gone for a day or more. Similarly, high school students in high density of acquaintanceship communities were half as likely to report having felt physically threatened in their school.

Density of acquaintanceship can influence crime by increasing the watchfulness of citizens, making them more likely to feel a responsibility to act and making it easier to identify suspects. A high density of acquaintanceship can also provide for monitoring and correcting early misbehavior and delinquency. As one youth in Freudenburg’s study complained, “A guy can’t get away with anything around here. It seems as though, whenever I do anything wrong, my old man’s found out about it before I even get home” (1986, 46).

Mistrust of government

Rural residents are more likely to be suspicious of government, particularly State and Federal governments, which are seen as insensitive to local needs. Suspicion of a strong central government is reflected in the attitudes of rural residents, who are generally less supportive than urban residents of government programs that provide welfare, housing, unemployment benefits, higher education, and Medicaid (Swanson, Cohen, and Swanson 1979). Proponents of rural development often warn against public policies dictated by a strong central government (Littrell and Littrell 1991; Seroka and Subramaniam 1991). In

1994, most police cooperated with provisions of the recently enacted Federal Brady Act, which required local police to conduct background checks on potential gun buyers. However, five rural sheriffs went to court challenging the act. Their biggest concern was the Federal Government's attempt to coerce them into enforcing the Federal law. As Sheriff J.R. Koog, of Val Verde County, Texas, remarked, "No, sir, Congress can't sit up there and tell this lowly little sheriff out here at the end of the world what to do" (Verhovek 1994, A8). Another sheriff remarked, "[T]he federal government does not have the power to conscript me to do a federal job" (Greenburg 1996, 4).

Antigovernment sentiments are particularly strong in the West, where the Federal Government controls or regulates vast areas of land and water. Government control of these resources is a sensitive issue because many residents earn their livelihood from agriculture or from such extraction industries as logging and mining. In some areas, threats of violence against Federal authorities have caused Federal agencies to stop performing some of their duties. As the *New York Times* has reported, "To wear a uniform of the Federal Government in some counties is now seen as wearing a target" (Egan 1995, A1). These threats come from a variety of individuals, even from local government officials. Mistrust of the Federal Government is also evidenced by the rise of citizen militias in the West (DeLama 1994b, 1994a). Activists in the militia movement have armed themselves in the belief that it may soon be necessary for them to use force to protect their rights. The mistrust of government expressed by militia groups has a long history in America, dating back to the origins of this country, with particularly strong ties to the countryside (Stock 1996).

Few rural citizens encourage violence against the government and fewer still directly engage in antigovernment violence. However, those expressing violent antigovernment sentiments will find more tolerance for their views among rural dwellers than urban ones.

Reluctance to seek outside assistance

Residents in rural communities tend to keep community problems to themselves, an attitude not unlike those in some urban immigrant communities. Laub (1981) found that, although the overall likelihood of reporting crime to the police was similar for rural and urban citizens, those in urban areas failed to report it because they thought nothing could be done and those in rural areas failed to report it because they considered the crime a private concern, even when the offender was a stranger.

In Weisheit's (1993, 223) study of marijuana growers, a rural police officer noted that:

People in rural areas tend to be pretty conservative generally and don't want government coming in, or an outsider coming in, or foreigners coming in. They want the status quo and that's it. And when they develop a cancer from within they don't want it going out. They don't want people telling about it and they don't want people rocking the boat. They are the same people who will ostracize members of their society who get caught [growing marijuana].

A New Mexico State Police officer observed, "In a lot of these [rural] areas, there's really no law enforcement—no police, no sheriff, no state police station. People prefer to handle their own affairs and disputes by themselves" (Applebome 1987, 11). The officer's comment reflects two dimensions of the issue that are distinct but reinforce each other. First, rural citizens may less often choose to deal with a problem formally because they see it as a personal problem. Second, in some rural areas, formal police authority is in fact physically distant and is not an immediate option.

Economic factors

Economic conditions in rural America vary widely, from growth and prosperity to decline and abject poverty. Many rural areas adjacent to large metropolitan areas have experienced rapid growth in population and economic activity (Johnson and Beale 1995). Other rural communities are realizing economic benefits from modern technology and from the siting of manufacturing in their communities. Advances in technology have meant that some kinds of work can be done anywhere the worker has access to telephone lines. As Hackenberg and Kukulka (1995, 190) note:

Small Midwestern towns, where property values have fallen for decades, are linked to the financial and population centers on the Atlantic, Pacific, and Gulf coasts by communications technology. Creative work, clerical operations, billing and marketing, sales promotions, and consulting services can all be economically provided from these accessible points on the information highway.

Fairfield, Iowa, for example, is a community of approximately 10,000 people, nearly 60 miles from the nearest interstate highway. It is also home to Telegroup, Inc., and Global Link, both of which sell long distance international telephone services and have annual sales exceeding \$300 million (Van 1997).

A number of rural communities have benefited from the location of modern manufacturing plants. Inexpensive property, cheap labor, low crime, lax zoning, and low taxes make many rural areas appealing to industries of all kinds.

The lengths to which some rural communities go to attract prisons is a testament to the current economic condition of these areas and the perceived prospects for other forms of economic development.

Some bring long-term prosperity, while others exploit rural communities by moving whenever the next town offers a better deal. The most obvious example of how manufacturing has impacted rural communities is the tendency for new automobile assembly plants to site in rural locations (Gelsanlitter 1990). These plants bring economic and population growth, but local communities may also experience an increase in crime and social disruption. For example, in Spring Hill, Tennessee, a Saturn automobile plant opened in the late 1980s, doubling the population to 1,464 people. Commercial growth followed, as did crime: “Worst crime before Saturn arrived?” said Paul Williams, a former police chief. ‘I don’t know. Weekend drunks, maybe.’ Now, the police force, which has grown to seven, from four, has to deal with more serious problems, like drugs” (Janofsky 1993, 20).

One police chief with whom we spoke anticipated that the opening of a large Federal building in his area would result in an increase in burglary because “now that people will have jobs, they will also have VCRs and other things worth stealing. Until now there hasn’t been much for a would-be burglar to take.”

In contrast to the prosperity of rural communities adjacent to urban areas, many remote rural communities have not experienced growth and have long suffered from poverty, unemployment, and underemployment. For the economically disadvantaged “backwaters” of rural America, there is little reason to believe that circumstances will improve in the near future. As Lyson and Falk (1993, 3–4) note in their focus on nine economically lagging regions of the United States:

Today, lagging rural regions are best viewed within a larger global economy. The socioeconomic gap between rural America and urban America has begun to widen. . . . The occupational structure is fragmenting into well-paying jobs for highly skilled, well-educated, technologically sophisticated workers and low-paying, low-skill, service jobs. Migration no longer offers the same opportunity for people in forgotten places to improve their economic lot as it did even a generation ago (Wilson, 1987). Within lagging rural regions, branch plants are closing their doors and moving to Third World locations where wages are even lower and workers

less organized than in the economic backwaters of the United States (Lyson, 1989). The forgotten places . . . are being by-passed in the newly forming global economy.

One sign of desperate economic circumstances is the effort by many rural communities to attract prisons:

A generation ago, rural America found the notion of accepting a prison so repellent that many communities sued their state governments to keep them out. . . . [today] small towns from California to Florida are battling to get a penitentiary in their backyard. In many cases they are offering free land, utilities and cash incentives for the chance to get a slice of what is turning out to be the public works mega-project of the 1990s. In jobs and job security, prisons are doing for Main Street U.S.A. what military bases did during the cold war. (Lamb 1996)

The percentage of prison inmates housed in nonmetropolitan counties has increased steadily over time (Beale 1993). In general, prisons are attractive to the same economically depressed areas that are willing to house other undesirable industries, including power plants, new landfills, hazardous waste facilities, and recovery plants for garbage (Shichor 1992). For builders, these areas have the advantages of high unemployment, low labor costs, little or no union representation, and lax or nonexistent zoning regulations.

The long-term impact of prison construction on economic development and crime is unclear. A prison may provide stable employment, but the stigma of having prisons may make it more difficult to attract other businesses (Moberg 1996). At best, prisons halt or slow economic decay, saving communities from economic ruin, but also preventing dramatic growth. The lengths to which some rural communities go to attract prisons is a testament to the current economic condition of these areas and the perceived prospects for other forms of economic development.

There is no clear evidence that the threat to citizens from prison escapes is a serious problem, nor is there conclusive evidence that a prison brings an increase in local crime (Shichor 1992). Prison visitors do not generally move to the area, nor do inmates generally settle in the area upon their release, but both patterns may change. We know of at least one rural community in which gang leaders who run drug operations from their prison cells have had confederates move to the community to facilitate communication with outside operatives. Research in Oregon found that released inmates often remained in the local community for aftercare programs, which were required as a condition of parole

The U.S. Immigration and Naturalization Service estimates that as many as 25 percent of the meat processing workers in the Midwest are illegal aliens. Taking such economically dispossessed immigrants and putting them into culturally homogeneous small communities creates the potential for racial tensions and hate crimes.

(Caillier and Versteeg 1988). As the drive to build more prisons continues, and as new prisons are sited in rural areas, it will become crucial to understand why crime increases follow the arrival of prisons in some communities and not others.

Efforts to spur economic growth in rural areas have sometimes increased crime-related problems while having little impact on the economic vitality of the area. Particularly questionable is the pursuit of rural economic development by promoting tourism and recruiting low-skill, labor-intensive industries, such as meat and poultry processing plants. Local policy-makers often assume that increased employment betters the lives of residents, but wages and benefits in some industries are so low that full-time employees still have incomes well below the poverty level. Reduced unemployment thus may only shift people from unemployed poor to working poor (Browne et al. 1992).

Gouveia and Stull (1995) illustrate this problem in their examination of the impact of two large meat-packing plants near the small community of Garden City, Kansas. Because of technological advances in meat processing, these new jobs were all unskilled.

Consequently, wages in these plants were low, and wages in the newly created service sector were even lower. As a result, per capita county income dropped from 94 percent of the State average in 1980 to 91.5 percent of the State average in 1988—more than \$1,300 below the State average and \$2,111 below the national average (Gouveia and Stull 1995). In addition to being low paying, the work was demanding and injuries were frequent; as many as 4 in 10 meat processing workers were injured each year (Stull and Broadway 1995).

Because the local population was not large enough to meet the labor needs of the plants, workers were recruited from across the country. Mobile home parks sprang up to house the workers, and social problems soon followed. School enrollment soared, particularly for minority and bilingual students. “In 1990, Garden City’s school district had the highest dropout rate in Kansas, student turnover of almost one-third each year, and chronic absenteeism” (Gouveia and Stull 1995, 91). Demands on temporary shelters increased 2.5 times in just 6 years, and crime increased dramatically. “Both violent and property crime climbed throughout the decade in Finney County, while falling in the

state. The incidence of child abuse more than tripled to exceed the state average by 50 percent” (Gouveia and Stull 1995, 91). Such areas are also likely to have an inadequate tax base to fully support the increased demands placed on the criminal justice system, a problem compounded by the common practice of extending generous tax incentives initially to attract processing plants.

Some of the largest operations are sited in communities of only 1,100 or 1,200 people, far beyond the capacity of local residents to supply the required labor needs (Hackenberg 1995). Consequently, companies recruit unskilled immigrants, particularly Asians and Hispanics, who are desperate for work. There are allegations that the companies also recruit directly in Mexico. The U.S. Immigration and Naturalization Service estimates that as many as 25 percent of the meat processing workers in the Midwest are illegal aliens (Heges, Hawkins, and Loeb 1996). Taking such economically dispossessed immigrants and putting them into culturally homogeneous small communities creates the potential for racial tensions and hate crimes. It is also unlikely that the justice systems in these rural communities are prepared to handle culturally diverse populations. Solving the problems described in the meat and poultry processing industries is complicated by the rise of a world economy in which cheap labor in underdeveloped countries competes directly with cheap labor in the United States.

The potential long-term impact of these low-wage, labor-intensive industries is disturbing. Rural Americans have a long history of mistrust and even hostility toward the government and the banking industry (Stock 1996). Dyer (1997) argues that the farm crisis of the 1980s revived and fueled existing antigovernment and antibanking sentiments throughout rural America. Feeling victimized and powerless in the legitimate political and economic system, many became sympathetic to the arguments of militias and other antigovernment groups. Similar reactions seem likely to the continued use of rural areas to site industries that are dangerous for employees while providing neither a living wage nor adequate fringe benefits.

Demographic factors

For much of its history, the United States has been a predominantly rural society. In 1790, for example, there were only 8 communities in the United States with more than 5,000 people, and the entire population of the United States was less than 4 million people. In 1917, a majority of the United States’ population, for the first time, was urban. Today nearly three-fourths of the population of the United States lives in urban areas. It is not that rural areas have lost population; they simply have not grown as fast as urban areas.

Historically, as the United States' population has shifted from rural to urban areas, young skilled workers moved from the countryside to the city, economically dispossessed minorities moved to cities seeking employment opportunities, and foreign immigrants settled mainly in the largest cities. The rural population continued to grow because rural families were large, offsetting the effects of outmigration. In the 1970s, these patterns changed. The "rural turnaround" began. Rural areas started growing because urban residents were moving into the countryside in larger numbers. Many were seeking the amenities commonly associated with rural areas, both from the physical environment (e.g., mountains, lakes) and from a social environment in which crime and other urban ills were less pronounced. Although economic conditions in the 1980s slowed the flow of people into the countryside, the strong economy of the 1990s once again saw many rural areas gain population as a result of net immigration. Those moving from the city were often retirees, commuters, or adults drawn to recreation (Edmondson 1997; Johnson and Beale 1995).

Among rural areas, the greatest growth has been in communities within commuting distance of metropolitan areas, in retirement communities, and in communities that have attracted manufacturing or service industries. While economically vital rural areas experience population increases, economically depressed rural areas continue to lose citizens over time as young people move out and those who stay age in place (Johnson and Beale 1995).

The number of people age 65 years and older in the United States is increasing at a 2.4-percent annual rate. "By the year 2025 at the latest, the proportion of all Americans who are elderly will be the same as the proportion in Florida today. America, in effect, will become a nation of Floridas—and then keep aging. By 2040, one in four Americans may be over sixty-five" (Peterson 1996, 15). Contributing to the aging of rural America is a decline in rural family size over the past 50 years. Population growth fueled by adult immigration rather than births means that the rural population is aging even more rapidly than is urban America.

The graying of America's population will have an impact on rural America. Drawn by a lower cost of living, relatively less crime, and a slower pace, small towns and rural areas have been popular retirement locations. As the number of retirees continues to grow, the number who retire to rural areas will also grow. The full implications of this demographic shift on crime are unclear, but several outcomes seem likely. First, because the crime rate among senior citizens is very low, and many senior citizens have relatively good financial resources, the number of crimes committed by these citizens should be substantially fewer than those committed by a comparable number of young people. In particular, violent crimes should be less frequent. Second, crimes *against* the elderly will probably increase, including health insurance fraud, fraud in home repairs,

and elder abuse by care providers and family members. Third, some forms of crimes by the elderly will likely increase, including Medicare fraud and the illegal sale of prescription medicines. Fourth, fear of crime is high among seniors. The large number of senior citizens and their propensity to vote may make rural crime control an increasingly important legislative agenda item.

Continued population growth and urban sprawl will mean a steady reduction in the number of rural areas and a continuous supply of places in transition from rural to suburban or urban. "Across the nation, 1 million acres of farmland are being converted to urban or suburban uses each year, a rate of two acres per minute" (Brandon 1996). In California's Central Valley, for example, it is estimated that, by the year 2040, the population will triple and housing will consume more than 1 million acres of irrigated farmland (Goldberg 1996).

Rapidly growing rural communities may see crime increase three to four times faster than the population (Freudenburg and Jones 1991). These areas also are subject to "spillover crime" from urban centers, such as increased gang activity (Wells and Weisheit 1998). Some States have reported an increase in the phenomenon of urban bank robbers going to outlying areas, where they believe the banks will be easier targets. Police have even revived a century-old word to describe these robbers—"yeggs" (*Law Enforcement News* 1997). Growth is likely to put a financial strain on criminal justice resources and to foster divisiveness in rural communities (Johnson and Beale 1995).

Technological factors

America's shift from being predominantly rural to predominantly urban has been largely due to developments in technology. As fertile farmland is taken out of production, farmers will be increasingly pressured to maximize yields on the land that remains. This will mean an even greater reliance on pesticides, herbicides, and concentrated fertilizers. The theft of farm chemicals is already a problem and is likely to become more serious (e.g., Johnson 1994). Because they are sold in highly concentrated forms and difficult to tag with identifying markers, the theft of farm chemicals may become simpler and more lucrative than the theft of livestock or farm machinery. A 1992 report from California indicated that pesticide thefts were becoming more frequent and more expensive, with the typical replacement value of a single theft between \$30,000 and \$70,000 (Pesticide Action Network North America Update Service 1992). More recently, California officials brought charges against a man for fencing \$1.5 million worth of stolen herbicides (*Evansville [Indiana] Courier* 1995). Commonly used varieties can sell for \$175 for a 5-gallon case. The most concentrated and expensive herbicides can sell for as much as \$115 for only 7.5 ounces, which will cover nearly 5 acres. It is possible to carry more than

\$500,000 of this concentrated herbicide in the back of a pickup truck (Smith 1996). Given these prices, the profits for thieves can be substantial, with correspondingly large losses for farmers. Despite the magnitude of losses, little is known about the structure of these theft operations.

One countertrend to the increased use of chemicals is found in new agricultural practices, such as no-till and organic farming. However, these practices require more expensive farm machinery. Farming has come to rely heavily on machine technology. The modern mega hog farm, for example, relies so much on technology that the average hog requires only about 12 minutes of human attention during the 4 months it takes to grow to maturity (Kilman 1995). Mechanization requires a greater capital investment, making farms more attractive targets for theft and vandalism.

The costs of raising livestock also add to the problem. Artificial insemination is the commonly accepted way to impregnate dairy and beef cattle. The semen of prize bulls can be worth thousands of dollars at an auction. The editor of a farm journal in an Eastern State described to us how thieves removed from a ranch two \$80,000 nitrogen tanks that stored frozen bull semen.

As farms and ranches become larger, requiring more machinery and other expensive agricultural technologies, and as many more are operated by corporations rather than families, employee theft will become a greater problem. For example, one investigator in Florida noted that many cattle thefts are committed by present or former employees. These individuals often work long hours for low wages, are transient or provide seasonal labor, and have little financial or emotional investment in the farm or the farm owner. They make arrangements with auction houses and slaughterhouses to fence stolen animals for cash. For both farm machinery and livestock thefts, technology facilitates the commission of crimes. Large trucks to haul stolen goods and a highway system that makes many rural areas easily accessible mean that physical isolation no longer provides the same level of protection against theft. The Attorney General's Office for the State of Iowa, for example, found that most agricultural crimes occurred within about 20 miles of either side of the interstate highways that run through the State (Statistical Analysis Center 1985).

The rise of factories, which required workers to gather in a single location, made cities the centers of economic development. Initially, this rural-to-urban movement resulted in a net loss of people from rural areas. However, in recent decades, a reverse migration pattern has occurred as industries, businesses, and people have moved out of metropolitan centers to surrounding areas. Demographers have described this latter pattern as *deconcentration*, reflecting "a long-term and gradual dispersal of the United States' population into smaller,

less densely settled cities and towns” (Johnson and Beale 1995). Deconcentration is driven by technological changes that allow more work to take place in less urban locations, as dominant industries change from large-scale manufacturing (which requires large urban centers to be efficient) to information management, knowledge creation, and service provision (which does not).

However, technological advances have not benefited all rural residents. A 1997 report by the California Institute for Rural Studies argued that advances in technology, combined with changes in the use of migrant labor, resulted in real wages that were lower than they were 20 years earlier (Schodolski 1997). Thus, for some rural Americans, technology has served to hasten the decline in living standards.

The impact of technology will probably be very different for the wealthiest and for the poorest rural citizens. Technology will work *for* those citizens who are better educated and who already have a higher standard of living. It will facilitate telecommuting, distance learning, and the development of small businesses that utilize communications networks to provide services, such as technical assistance, or to ship information-based products, such as computer software. Technology is likely to work *against* the poorest rural citizens whose livelihoods are based on labor-intensive jobs. The skills required for these jobs will decline as technology advances, and wages will decline as rural workers increasingly compete with unskilled workers in underdeveloped countries.

Technological advances will not be equally available to all rural areas. The wealthiest rural areas and those near large metropolitan areas likely will be among the first to have access to modern technological advances. By contrast, the poorest rural areas likely will be among the last to benefit from technology. Consider, for example, that households outside metropolitan areas are about twice as likely as those inside metropolitan areas to be without telephones. Perhaps the most dramatic illustration is in rural Kentucky, where one in five nonmetropolitan counties has more than 20 percent of homes without telephone service (U.S. Bureau of the Census 1993). Although urban residents without phones can often find one next door or down the block, in rural areas, the nearest phone may be a considerable distance away, and some rural areas still are not served by cellular telephone service providers.

Technology’s impact on rural America has been substantial, but the impact of future technological developments on rural crime is not clear. Such predictions require the ability to anticipate new technologies, as well as the ability to imagine how those technologies might be turned to criminal advantage. Both have proven difficult to anticipate, but we can make informed speculation. The advent of satellite communications, electronic banking, shared computer databases of

personal information, and the Internet will generate new kinds of crimes. These new crimes will involve electronic access to information, or digital codes, that depend on electronic connectivity and communication access that is almost unrelated to physical distance. It will make rural citizens as vulnerable as urban residents to the new forms of crime, including electronic fraud, theft, vandalism, trespassing, even personal abuse such as harassment, threats, and cyberstalking (Banks 1997).

Race, Ethnicity, and Crime in Rural America

The link between race, ethnicity, and crime in rural areas is understudied. In general, rural areas are more racially homogenous than large cities. In central cities, whites comprise about 66 percent of the population, but in rural areas, they account for more than 90 percent of the population (see exhibit 6). In some large industrial States with diverse urban populations, such as Illinois, Michigan, and New York, the rural population is more than 97 percent white. In seven States, minorities are better represented in rural than urban areas: Alaska, Arizona, Idaho, Montana, New Mexico, North Dakota, and South Dakota. In these States, there are large Native American (or Eskimo) and/or Mexican-American populations. As exhibit 6 shows, Native Americans are among the only minority groups in America better represented in rural areas than in central cities (U.S. Bureau of the Census 1990).

Exhibit 6. Percentage of the population in selected race or ethnic categories in central cities and rural areas*

	Percentage in central cities	Percentage in rural areas
White	66.2	90.6
Black	22.0	6.2
American Indian	0.6	1.3
Asian	4.2	0.5
Hispanic	14.8	3.1

* Column percentages do not total 100 because some categories of race are not included and because the Census Bureau treats "Hispanic" as an ethnicity and not a race, allowing for overlap between categories of race and ethnicity.

Source: U.S. Bureau of the Census 1990, table 3.

These national averages do not reveal the complete picture. First, most of the racial-ethnic differential between rural and urban areas is due to differences in the proportion of minorities in central cities. Second, rural areas differ greatly in the composition of their population, reflecting large regional variations. For example, with only three exceptions, all nonmetropolitan counties with a black population exceeding 20 percent are located in the South. Nonmetropolitan counties with a Mexican-American population that is greater than 20 percent are located exclusively in the Southwest. Nonmetropolitan counties with substantial Native American populations are mostly west of the Mississippi River.

It appears that the link between race and crime differs somewhat across rural, suburban, and urban areas. Bachman's (1992a) examination of NCVS data revealed that, in urban areas, blacks had higher victimization rates than whites for violent crimes. In rural areas, the violent crime victimization rate for whites was higher. For property crimes such as burglary and household larceny, blacks had higher rates of victimization across community sizes.

Using NCVS data, Laub (1983) estimated personal crime offense rates for communities of varying sizes. He found that race differences across community sizes varied by age. For example, black/white differences in offense rates for juveniles were greater in central cities than outside central cities. For adults, these differences (by community size) practically disappeared.

Although urban studies of the street-level drug trade reflect a high representation of minorities, Weisheit's (1992) study of rural marijuana cultivators found no involvement by blacks and only a few cases of involvement by Hispanics. Anecdotal evidence also suggests the lack of involvement of minorities in rural methamphetamine laboratories.

A related issue is the way minorities are handled in the criminal justice system. Most studies have found that minorities are overrepresented in the justice system. However, nearly all such studies are conducted in urban areas. One study of juvenile offenders in the State of Washington found substantial variations across counties (Bridges 1993). Areas where minorities were overrepresented had three features in common: (1) most of their population lived in cities, (2) there was a large minority population, and (3) the violent crime rate was high. While this was the general pattern, not every metropolitan county showed high disproportionality and not every rural county showed low disproportionality. Interpreting these findings is complicated by the small minority populations in many rural counties. For example, in 1990, 23 of Washington's 34 counties had small minority populations and sentenced no minority youths to confinement.

Although crime among American Indians has been given some attention (e.g., Mann 1993; Nielsen and Silverman 1996), little research focuses on comparing rural and urban patterns of crime or variations in crime across rural Native American groups. Crime among American Indians in rural areas is in particular need of further study. There are great differences in the histories and cultures of American Indian groups. Geography and economic factors add to the complexity, combined with a dizzying array of jurisdictional issues and criminal justice structures (cf. Baker 1993; Canby 1988; Deloria and Lytle 1983; Green and Tonnesen 1991).

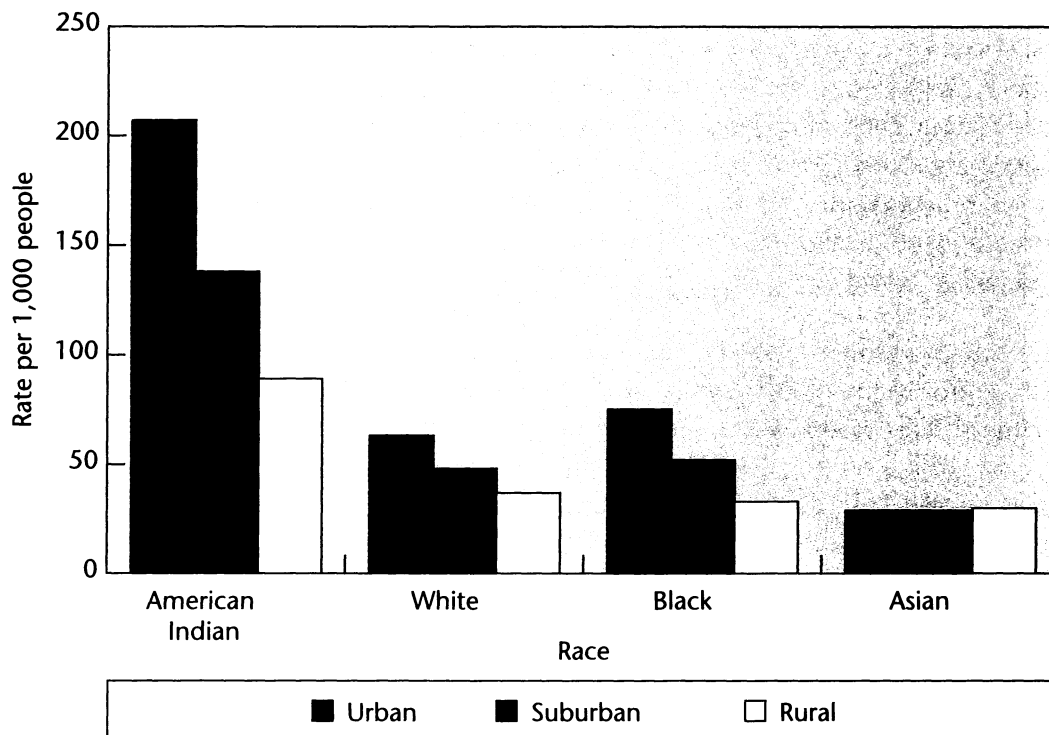
American Indians appear to have high rates of child abuse and very high rates of alcohol-related offenses compared with other groups. Obtaining accurate crime figures is always difficult, but may be particularly so in Indian Country, where tribal police may be seriously underfunded (depending on the tribe), may have few incentives for officially reporting crime to the FBI, and may operate in cultures that are often closed to outsiders, even by rural standards.

At least two studies focus on American Indian crime and include rural-urban comparisons. Jensen, Stauss, and Harris (1977), using several data sources, found that crime rates for American Indians were higher than for whites, blacks, or Asian-Americans. They also found that white/Native American differences were smaller in rural areas than in urban areas. Native American crime rates in urban areas were four times those of whites, while in rural areas the crime rate was only about 2.5 times higher.

More recently, Greenfeld and Smith (1999) assembled information about American Indian crime using both victimization data and official police data from UCR. Self-reported victimization data showed substantial variations across rural, suburban, and urban areas and between American Indians and other racial groups. Exhibit 7 shows that violent victimization was higher among American Indians than any other racial group. In fact, rural American Indians had higher victimization rates than urban blacks. And, except for Asians, victimization rates for each racial group were lowest in rural areas.

The future crime problems of Native Americans will depend heavily on the social and economic circumstances of these groups. Recent changes in the economic circumstances of some Native American groups following the legalization of gambling indicate the need for caution about assuming that future economic and crime patterns are likely to be simple extensions of current patterns.

Exhibit 7. Violent victimization by race



Source: Created from data presented in Greenfeld and Smith 1999.

Although research about crime among rural American Indians is relatively sparse, it appears full and rich compared with studies of other rural minority groups. For example, very little is known about rural-urban differences in crime among Hispanic and Asian populations. Self-report studies of delinquency, especially substance use, indicate lower rates among rural Hispanics than among rural whites and blacks. However, Hispanic dropout rates are much higher. One study indicated that Mexican-American adolescents who drop out of high school are more likely than white dropouts to be involved in violence, as both perpetrators and victims (Chavez, Oetting, and Swaim 1994).

So little is known about crime among rural Asian-Americans that predictions about future patterns in this group are impossible. Anecdotal evidence indicates that some groups have been subjected to hate crimes. For example, one group of Vietnamese living in a coastal area of one Southern State was the target of vandalism and harassment as it took up its traditional occupation of fishing, in direct competition with local fishermen.

What Does the Future Hold?

Rural crime, as with crime in general, is the result of a confluence of many factors. Technology, geography, demography, economics, and culture all interact to shape rural crime. Predicting rural crime requires accurately anticipating how each of these factors will change and how relationships among them will change. Moreover, the rapid development of a global economy and improvements in communications and transportation will likely increase the speed at which international developments are felt in rural settings.

This all points to many areas for future research. Our discussion has focused on the variety of factors that shape rural crime and on contemporary rural crime issues in the United States. Other issues, such as considerations of rural crime over time, international variations in rural crime, and variations in crime among rural areas within the United States have had to be neglected. Comparing rural and urban crime, as we have done throughout this essay, is only a first step.

A careful look at rural crime over time indicates the need for caution about regarding future variations in rural crime as simple linear projections from the present. Although homicide today generally occurs more frequently in urban areas than rural areas, this was not always true (cf. Lane 1997). As historians Johnson and Monkkonen (1996, 1) observed in their analysis of crime in Europe since the Middle Ages:

Over time there have been both large and subtle shifts in this elemental dichotomy [between violent crime in cities and in the countryside]. The classic city had walls to keep armies and criminals out. Gangs were in the countryside. Today, at least in the suburbs and rural parts of the United States, many people would like to wall cities to keep criminals and gangs in.

Thus, the relatively low violent crime rate now typical of rural areas should be viewed as a variable that merits explanation.

In addition to studying variations over time, future research will benefit from an analysis of variations in rural crime across cultures. Although there has been some rural crime research in other countries, particularly in Australia (Jobes et al. 1999), rural crime in non-Western societies has been studied infrequently. Much of the work that has been done on crime in non-Western societies has been carried out by anthropologists, whose work generally has not been used by criminologists to advance criminological theory (Moss 1997). And, the nature of the discipline discourages the development of broad theories of crime by anthropologists themselves.

More needs to be done to examine variations in crime among rural areas in the United States. Provocative work focusing primarily on regional variations in rural American violence has been conducted by Nisbett and Cohen (1996), who observed that high homicide rates in the South are almost entirely the result of very high rates among white rural males. For females and for minority males, there are only minor differences between homicide rates in the South and in other regions of the country. Nisbett and Cohen argue that these high rates are the result of a "culture of honor," in which violence is an accepted response to an affront to one's home, family, or person. They build a persuasive argument that the culture of honor can be traced to the type of agricultural activity in which the region's ancestors engaged. Nisbett and Cohen and others (e.g., Fischer 1989) make a powerful case for incorporating community size, regional history, race, and gender into analyses of violence in America. Their work is a good example of the utility of incorporating variations among rural areas in explanations of crime.

The work of Sampson and associates (Sampson 1986; Sampson and Groves 1989; Sampson, Raudenbush, and Earls 1997) on the relationship between crime and the economic and social characteristics of urban communities should be extended to the study of rural communities. Because 88 percent of the incorporated communities in America have less than 10,000 people (Hobbs 1994), and because many of these small communities are rural and relatively self-contained, they offer the advantage of numbers of communities and variability, allowing for rigorous statistical testing of structural theories of crime, such as the social disorganization theory. Many, but not all, rural places have relatively less "contaminating" interaction with adjacent areas than occurs in most urban places, and this contamination is itself a variable worth including in studies of crime.

Sampson and Castellano's 1982 analysis of the relationship between economic inequality and crime provides an excellent example of how including rural communities can help clarify and specify theories of crime and point to new directions for research. They found that economic inequality and criminal victimization were inversely related in urban areas, but not in rural areas, and they provided a thoughtful discussion of the implications for theories based on economic inequality.

This chapter has illustrated some of the many factors that shape rural crime. It has also used examples to argue that understanding rural crime requires understanding rural life. The study of rural crime provides a continuous reminder that a thorough understanding of crime requires a thorough understanding of the contexts in which crimes occur. Although some recent theories of crime have emphasized daily life and routine activities, these formulations have generally ignored the rural setting and have consequently missed the contributions

that might come from including a rural perspective (Weisheit and Wells 1996). By juxtaposing our understanding of the environments in which rural and urban crime occur, it may be possible to improve our general understanding of crime.

This chapter has focused on factors that will shape the future of rural crime, but those same factors will shape the administration of justice in rural America (Weisheit and Kernes 1997; Weisheit, Wells, and Falcone 1994). The overlapping social networks and high density of acquaintanceship that influence both the criminal offender and the victim also influence agents of the justice system. Rural police, judges, and probation officers are much more likely than their urban counterparts to live in the communities in which they work. Citizens recognize them and consider them on duty even when they are not wearing their uniforms. Many of them grew up in the same communities in which they work and must handle cases involving friends and relatives. Rural judges and prosecutors sometimes must proceed against members of their own families, something that would be unthinkable in most cities. In urban areas, criminal justice officials are able to make a distinction between their public and private lives that is far more difficult to draw in rural communities. Many crimes are problems in both urban and rural areas, but the contexts in which they occur and in which they are responded to are very different. Perhaps this is why rural police are able to clear a substantially higher percentage of known offenses than urban police. Perhaps this is why rural residents are less likely to believe police brutality is a problem in their communities. It is probably true everywhere that the same contextual factors that shape crime shape the community's response to it. In rural areas, however, it is impossible to ignore the connection.

References

- Angell, Ian. 1992. Winners and losers in the information age. *Society* 34:81-85.
- Angle, Paul. 1980. *Bloody Williamson*. New York: Alfred A. Knopf.
- Applebome, Peter. 1987. Some say frontier is still there, and still different. *New York Times* 12 December.
- Arthur, John A. 1991. Socioeconomic predictors of crime in rural Georgia. *Criminal Justice Review* 16:29-41.
- Associated Press. 1995. Thieves destroying walnut trees for valuable wood. 9 October. Retrieved 16 January 1997 from the World Wide Web: http://sddt.com/files/librarywire/DN95_10_09/DN95_10_09_1.htm.
- Bachman, Ronet. 1992a. *Crime victimization in city, suburban, and rural areas*. Report, NCJ 135943. Washington, D.C.: U.S. Department of Justice. Bureau of Justice Statistics.

- . 1992b. Crime in nonmetropolitan America: A national accounting of trends, incidence rates, and idiosyncratic vulnerabilities. *Rural Sociology* 57:546–560.
- Badger, Lee W. 1989. Reporting of child abuse: Influence of characteristics of physician, practice, and community. *Southern Medical Journal* 82:281–286.
- Bai, Matt. 1997. White storm warning: In Fargo and the Prairie States, speed kills. *Newsweek*, 31 March, 66.
- Baker, B.T. 1993. *Law enforcement within Indian nations*. Glynco, Georgia: Federal Law Enforcement Training Center.
- Baker, James N., Patricia King, Andrew Murr, and Nonny Abbott. 1989. The newest drug war: In rural America, crack and “crank” are now hot commodities in the backwoods. *Newsweek*, 3 April, 20–22.
- Banks, Michael A. 1997. *Web psychos, stalkers, and pranksters*. Albany: Coriolis Group.
- Bankston, William B., and David H. Allen. 1980. Rural social areas and patterns of homicide: An analysis of lethal violence in Louisiana. *Rural Sociology* 45:223–237.
- Bastian, Lisa D. 1995. *Criminal victimization 1993*. Report, NCJ 151658. Washington, D.C.: U.S. Department of Justice, Bureau of Justice Statistics.
- Bastian, Lisa D., and Taylor, Bruce M. 1991. *School crime: A National Crime Victimization Survey report*. NCJ 131641. Washington, D.C.: U.S. Department of Justice, Bureau of Justice Statistics.
- Beale, C. 1993. Prisons, population, and jobs in nonmetro America. *Rural Development Perspectives* 8:16–19.
- Belyea, Michael J., and Matthew T. Zingraff. 1985. Monitoring rural-urban drug trends: An analysis of drug arrest statistics, 1976–1980. *International Journal of the Addictions* 20:369–380.
- Brandon, Karen. 1996. Suburbia sprouts in California’s valley of plenty. *Chicago Tribune*, 18 November.
- Bridges, George S. 1993. Racial disproportionality in the juvenile justice system. Report submitted to the Commission on African American Affairs and Management Services Division/Department of Social and Health Services, State of Washington, Olympia, Washington.
- Brodsky, Harold. 1990. Emergency medical service rescue time in fatal road accidents. *Transportation Research Record* 1270:89–96.
- Browne, William P., Jerry R. Skees, Louis E. Swanson, Paul B. Thompson, and Laurian J. Unnevehr. 1992. *Sacred cows and hot potatoes: Agrarian myths in agricultural policy*. Boulder, Colorado: Westview Press.

Bullard, Robert D. 1994. *Unequal protection: Environmental justice & communities of color*. San Francisco: Sierra Club Books.

Bullard, Robert D., and Beverly Wright. 1993. *Confronting environmental racism: Voices from the grassroots*. Somerville, Massachusetts: South End Press.

Caillier, Mark W., and Karyn D. Versteeg. 1988. *Preliminary conclusions: Correctional impact on the city of Salem police services*. Salem, Oregon: Salem Police Department. Cited in David Shichor, Myths and realities in prison siting, *Crime & Delinquency* 38 (1992): 70–87.

Canby, William C., Jr. 1988. *American Indian law*. 2d ed. St. Paul: West Publishing Company.

Castellano, Thomas C., and Craig D. Uchida. 1990. Local drug enforcement, prosecutors, and case attrition: Theoretical perspectives for the drug war. *American Journal of Police* 9:133–162.

Chavez, Ernie L., Gene R. Oetting, and Randy C. Swaim. 1994. Dropout and delinquency: Mexican-American and Caucasian non-Hispanic youth. *Journal of Clinical Child Psychology* 23:47–55.

Chicago Tribune. 1998a. Group claims it set fires at ski resort to preserve lynx. 22 October.

———. 1998b. Vail attack called sign of growing eco-terrorism. 23 October.

———. 1997. Vandals free thousands of minks. 2 June.

———. 1989. Illegal drug trade spreads to rural areas. 4 August.

Clayton, Richard R. 1995. *Marijuana in the "Third World": Appalachia, U.S.A.* Boulder, Colorado: Lynne Reinner Publishers.

Cronk, Christine, and Paul D. Sarvela. 1997. Alcohol, tobacco, and other drug use among rural and urban youth: A secondary analysis of the Monitoring the Future data set. *American Journal of Public Health* 87:760–764.

DeLama, George. 1994a. For militias, invaders of U.S. are everywhere. *Chicago Tribune*, 31 October.

———. 1994b. West chomping at the bit over Federal control. *Chicago Tribune*, 27 October.

Deloria, Vine, Jr., and Clifford M. Lytle. 1983. *American Indians, American justice*. Austin: University of Texas Press.

Doerner, William G. 1988. The impact of medical resources on criminally induced lethality: A further examination. *Criminology* 26:171–179.

- Donnermeyer, Joseph F. 1994. Crime and violence in rural communities. Paper presented at the 1994 Annual Meeting of the Academy of Criminal Justice Sciences, Chicago.
- . 1992. The use of alcohol, marijuana, and hard drugs by rural adolescents: A review of recent research. In *Drug use in rural American communities*, edited by Ruth W. Edwards. New York: Haworth Press.
- Donnermeyer, Joseph F., and G. Howard Phillips. 1982. The nature of vandalism among rural youth. In *Rural crime: Integrating research and prevention*, edited by Timothy J. Carter, G. Howard Phillips, Joseph F. Donnermeyer, and Todd N. Wurschmidt. Totowa, New Jersey: Allanheld, Osmun.
- Dyer, Joel. 1997. *Harvest of rage: Why Oklahoma City is only the beginning*. Boulder, Colorado: Westview Press.
- Edmondson, B. 1997. A new era for rural America. *American Demographics* 17:30–31.
- Egan, Timothy. 1995. Federal uniforms become target of wave of threats and violence. *New York Times*, 25 April.
- Evansville (Indiana) Courier*. 1995. Farm thieves reaping big profits from agricultural chemicals. 30 April.
- Fischer, Claude S. 1980. The spread of violent crime from city to countryside, 1955 to 1975. *Rural Sociology* 45:416–434.
- Fischer, David Hackett. 1989. *Albion's seed: Four British folkways in America*. New York: Oxford University Press.
- Flynn, Kevin, and Gary Gerhardt. 1989. *The silent brotherhood: Inside America's racist underground*. New York: Free Press.
- Freudenburg, William R. 1986. The density of acquaintanceship: An overlooked variable in community research. *American Journal of Sociology* 92:27–63.
- Freudenburg, William R., and Robert Emmett Jones. 1991. Criminal behavior and rapid community growth: Examining the evidence. *Rural Sociology* 56:619–645.
- Frisch, S. 1997. Mink farmers brace for vandalism wave. *Chicago Tribune*, 13 November.
- Gagne, Patricia L. 1992. Appalachian women: Violence and social control. *Journal of Contemporary Ethnography* 20:387–415.
- Gardner, LeGrande, and Donald J. Shoemaker. 1989. Social bonding and delinquency: A comparative analysis. *The Sociological Quarterly* 30:481–500.
- Gelsanliter, David. 1990. *Jump start: Japan comes to the heartland*. New York: Farrar, Straus & Giroux.

Goldberg, Carey. 1996. Alarm bells sounding as suburbs gobble up California's richest farmland. *New York Times*, 20 June.

Gouveia, Lourdes, and Donald D. Stull. 1995. Dances with cows: Beefpacking's impact on Garden City, Kansas, and Lexington, Nebraska. In *Any way you cut it: Meat processing and small-town America*, edited Donald D. Stull, Michael J. Broadway, and David Griffith. Lawrence: University Press of Kansas.

Green, Donald E., and Thomas V. Tonnesen, eds. 1991. *American Indians: Social justice and public policy*. Milwaukee: University of Wisconsin System, Institute on Race and Ethnicity.

Greenburg, Jan Crawford. 1996. Brady gun bill under attack. *Chicago Tribune*, 2 December.

Greenfeld, Lawrence A., and Steven K. Smith. 1999. *American Indians and crime*. NCJ 173386. Washington, D.C.: U.S. Department of Justice, Bureau of Justice Statistics.

Hackenberg, Robert A. 1995. Joe Hill dies for your sins: Empowering minority workers in the new industrial labor force. In *Any way you cut it: Meat processing and small-town America*, edited by Donald D. Stull, Michael J. Broadway, and David Griffith. Lawrence: University Press of Kansas.

Hackenberg, Robert A., and Gary Kukulka. 1995. Industries, immigrants, and illness in the new Midwest. In *Any way you cut it: Meat processing and small-town America*, edited by Donald D. Stull, Michael J. Broadway, and David Griffith. Lawrence: University Press of Kansas.

Hall, Bob. 1995. The kill line: Facts of life, proposals for change. In *Any way you cut it: Meat processing and small-town America*, edited by Donald D. Stull, Michael J. Broadway, and David Griffith. Lawrence: University Press of Kansas.

Hastings, Don. 1985. Big bucks for poachers. *Illinois Department of Conservation: Outdoor Highlights* 13:8-11.

Heges, Stephen, Dana Hawkins, and Perry Loeb. 1996. The new jungle. *U.S. News & World Report* (September 23): 34-44.

Hobbs, Daryl. 1994. The rural context for education: Adjusting the images. In *Perspectives on violence and substance use in rural America*, edited by Stephanie M. Blaser. Oak Brook, Illinois: North Central Regional Educational Laboratory.

Howlett, Debbie. 1997. Easy-to-concoct drug often makes users turn violent. *USA Today*, 10 September.

Janofsky, Michael. 1993. Rural town ages rapidly under Saturn's influence. *New York Times*, 15 August.

- Jensen, Gary E., Joseph H. Stauss, and William V. Harris. 1977. Crime, delinquency, and the American Indian. *Human Organization* 36:252–257.
- Jobes, Patrick C., Elaine Crosby, Herb Weinand, and Joseph F. Donnermeyer. 1999. Crime mapping in rural Australia. In *Proceedings of Mapping the Boundaries of Australia's Criminal Justice System*. Canberra: Australian Institute of Criminology.
- Johnson, Charles. 1994. Call the ag patrol. *Farm Journal* (February): 30–31.
- Johnson, Eric A., and Eric H. Monkkonen, eds. 1996. *The civilization of crime: Violence in town and country since the Middle Ages*. Urbana: University of Illinois Press.
- Johnson, Kenneth M., and Calvin L. Beale. 1995. The rural rebound revisited. *American Demographics* 17 (July): 46–49, 52–54.
- Johnston, Lloyd D., Patrick M. O'Malley, and Jerald G. Bachman. 1998. *National survey results on drug use from the Monitoring the Future study, 1975–1997*. Rockville, Maryland: U.S. Department of Health and Human Services, National Institute on Drug Abuse.
- Kilman, Scott. 1995. Iowans can handle pig smells, but this is something else: Giant hog “factories” strain inherent neighborliness of a rural community. *Wall Street Journal*, 4 May.
- Kirn, Walter. 1998. Crank. *Time*, 22 June, 24–27, 29–30, 32.
- Knickerbocker, Brad. 1998. U.S. fight against timber thieves. *Christian Science Monitor*, 23 March.
- Lamb, David. 1996. Main Street finds gold in urban crime wave: Once-struggling rural America sees economic salvation in one of the Nation's fastest-growing, most recession-proof industries—Prisons. *Los Angeles Times*, 9 October.
- Lane, Roger. 1997. *Murder in America: A history*. Columbus: Ohio State University Press.
- Laub, John H. 1983. Urbanism, race, and crime. *Journal of Research in Crime and Delinquency* 20:183–198.
- . 1981. Ecological considerations in victim reporting to the police. *Journal of Criminal Justice* 9:419–430.
- Law Enforcement News*. 1997. Hard-boiled yeggs turn their focus to softer bank targets. 15 May.
- Littrell, Donald W., and Doris P. Littrell. 1991. Civic education, rural development, and the Land Grant institutions. In *The future of rural America: Anticipating policies for constructive change*, edited by Kenneth E. Pigg. Boulder, Colorado: Westview Press.

Lyson, Thomas A. 1989. *Two sides of the Sunbelt: The growing divergence between the rural and urban South*. New York: Praeger.

Lyson, Thomas A., and William M. Falk. 1993. *Forgotten places: Uneven development in rural America*. Lawrence: University Press of Kansas.

Mann, Coramae Richey. 1993. *Unequal justice: A question of color*. Bloomington: Indiana University Press.

McCormick, John, and Paul O'Donnell. 1993. Drug wizard of Wichita: Did the chemist concoct a killer narcotic? *Newsweek*, 21 June, 32.

Miller, Martin G., Eric O. Hoiberg, and Rodney E. Ganey. 1982. Delinquency patterns of farm youth. In *Rural crime: Integrating research and prevention*, edited by Timothy J. Carter, G. Howard Phillips, Joseph F. Donnermeyer, and Todd N. Wurschmidt. Totowa, New Jersey: Allanheld, Osmun.

Moberg, David. 1996. State jobs: Economic boon or bust? *Illinois Issues* 22:14–23.

Montell, William L. 1986. *Killings: Folk justice in the upper South*. Lexington: University of Kentucky Press.

Moss, Geoffrey. 1997. Explaining the absence of violent crime among the Semai of Malaysia: Is criminological theory up to the task? *Journal of Criminal Justice* 25:177–194.

Nielsen, Marianne O., and Robert A. Silverman, eds. 1996. *Native Americans, crime and justice*. Boulder, Colorado: Westview Press.

Nisbett, Richard E., and Dov Cohen. 1996. *Culture of honor: The psychology of violence in the South*. Boulder, Colorado: Westview Press.

O'Dea, Patrick, Barbara Murphy, and Cecilia Balzer. 1997. Traffick and illegal production of drugs in rural America. In *Rural substance abuse: State of knowledge and issues*, edited by Elizabeth Robertson, Zili Sloboda, Gayle M. Boyd, Lula Beatty, and Nicholas J. Kozel. Rockville, Maryland: U.S. Department of Health and Human Services, National Institute on Drug Abuse.

Pendleton, Michael R. 1997. Looking the other way: The institutional accommodation of tree theft. *Qualitative Sociology* 20:325–340.

Perkins, Craig, and Patsy Klaus. 1996. *Criminal victimization 1994*. Report, NCJ 158022. Washington, D.C.: U.S. Department of Justice, Bureau of Justice Statistics.

Perrolle, Judith A., ed. 1993. Environmental justice. Special issue. *Social Problems* 40 (February).

Pesticide Action Network North America Update Service. 1992. California pesticide thefts on the rise. 17 September. Retrieved 2 November 1997 from the World Wide Web: <http://rtk.net/E2701T598>.

Peters, Victoria J., E.R. Oetting, and Ruth W. Edwards. 1992. Drug use in rural communities: An epidemiology. In *Drug use in rural American communities*, edited by Ruth W. Edwards. New York: Haworth Press.

Peterson, Peter G. 1996. *Will America grow up before it grows old?* New York: Random House.

Pimentel, David, and Marcia Pimentel. 1997. U.S. food production threatened by rapid population growth. Manuscript prepared for the Carrying Capacity Network, Washington, D.C., 30 October.

Pollan, Michael. 1997. Confessions of an American opium grower. *Harper's* (April): 35–58.

Public Employees for Environmental Responsibility and the Government Accountability Project. 1997. Action alert: Timber theft group sign-on letter. 28 October. Retrieved 12 June 1998: <http://www.accessone.com/gap/www/timberlet.htm>.

Rachel's Hazardous Waste News #66. The new urban garbage solution: Dump it in poorer, rural areas. 29 February. Retrieved 2 November 1997 from the World Wide Web: <http://rtk.net/E3391T132>.

Rand, Michael R., James P. Lynch, and David Cantor. 1997. *Criminal victimization, 1973–95*. Report, NCJ 163069. Washington, D.C.: U.S. Department of Justice, Bureau of Justice Statistics.

Rephann, Terry. In press. Links between rural development and crime. *Papers in Regional Science* 78.

Ringel, Cheryl. 1997. *Criminal victimization 1996: Changes 1995–96 with trends 1993–96*. Report, NCJ 165812. Washington, D.C.: U.S. Department of Justice, Bureau of Justice Statistics.

Salamon, Sonya. 1997. Culture. In *Encyclopedia of rural America: The land and people*, edited by Gary A. Goreham. Santa Barbara: ABC-CLIO.

Sampson, Robert J. 1986. Crime in cities: The effects of formal and informal social control. In *Communities and crime*, edited by Albert J. Reiss, Jr., and Michael Tonry. Vol. 8 of *Crime and justice: A review of research*. Chicago: University of Chicago Press.

Sampson, Robert J., and Thomas C. Castellano. 1982. Economic inequality and personal victimization. *British Journal of Criminology* 22:363–385.

- Sampson, Robert J., and W. Byron Groves. 1989. Community structure and crime: Testing social-disorganization theory. *American Journal of Sociology* 94:774–802.
- Sampson, Robert J., Stephen W. Raudenbush, and Felton Earls. 1997. Neighborhoods and violent crime: A multilevel study of collective efficacy. *Science* 277:918–924.
- Scheer, Scott D., Lynne M. Borden, and Joseph F. Donnermeyer. In press. The relationship between family factors and adolescent substance use in rural, suburban, and urban areas. *Journal of Child and Family Studies*.
- Schodolski, Vincent J. 1997. Farm workers earn less than in '76, data show. *Chicago Tribune*, 12 April.
- Seroka, Jim, and Seshan Subramaniam. 1991. Governing the countryside: Linking politics and administrative resources. In *The future of rural America: Anticipating policies for constructive change*, edited by Kenneth E. Pigg. Boulder, Colorado: Westview Press.
- Setterberg, Fred, and Lonny Shavelson. 1993. *Toxic Nation: The fight to save our communities from chemical contamination*. New York: John Wiley & Sons.
- Shichor, David. 1992. Myths and realities in prison siting. *Crime & Delinquency* 38:70–87.
- Silverman, Robert A. 1996. Patterns of Native American crime. In *Native Americans, crime, and justice*, edited by Marianne O. Nielsen and Robert A. Silverman. Boulder, Colorado: Westview Press.
- Smith, Brent L. 1980. Criminal victimization in rural areas. In *Criminal justice research: New models and findings*, edited by Barbara Raffael Price and Phyllis Jo Baunach. Beverly Hills: Sage Publications.
- Smith, Brent L., and C. Ronald Huff. 1982. Crime in the country: The vulnerability and victimization of rural citizens. *Journal of Criminal Justice* 10:271–282.
- Smith, Wes. 1996. In string of strange robberies, thieves target expensive herbicides. *Chicago Tribune*, 30 June.
- St. Clair, Jeffrey, and Alexander Cockburn. 1997. Idaho's enemies: The National Guard counts environmentalists among them. *The Progressive* 61:18–20.
- Statistical Analysis Center. 1985. *Farm related thefts in Iowa*. Ames, Iowa: Statistical Analysis Center, Office for Planning and Programming.
- Stewart, Phil, and Gita Sitaramiah. 1997. America's heartland grapples with rise of dangerous drug. *Christian Science Monitor*, 13 November. Retrieved 13 November 1997 from the World Wide Web: http://www.csmonitor.com/todays_paper/graphical/today/us/us.2.html.

Stock, Catherine McNichol. 1996. *Rural radicals: Righteous rage in the American grain*. Ithaca, New York: Cornell University Press.

Straus, Murray, and Richard J. Gelles, eds. 1990. *Physical violence in American families: Risk factors and adaptations to violence in 8,145 families*. New Brunswick, New Jersey: Transaction Publishers.

Straus, Murray, Richard J. Gelles, and Suzanne K. Steinmetz. 1980. *Behind closed doors: Violence in the American family*. New York: Anchor Books.

Stull, Donald D., and Michael J. Broadway. 1995. Killing them softly: Work in meat-packing plants and what it does to workers. In *Any way you cut it: Meat processing and small-town America*, edited by Donald D. Stull, Michael J. Broadway, and David Griffith, Lawrence: University Press of Kansas.

Swanson, Bert E., Richard A. Cohen, and Edith P. Swanson. 1979. *Small towns and small towners: A framework for survival and growth*. Beverly Hills: Sage Publications.

Taylor, Bruce M. 1997. *Changes in criminal victimization, 1994–95*. NCJ 162032. Washington, D.C.: U.S. Department of Justice, Bureau of Justice Statistics.

Tyson, Ann Scott. 1996. Drug abuse is quiet scandal in America's countryside. *Christian Science Monitor*, 16 September.

U.S. Bureau of the Census. 1999. POPClock. Retrieved 17 April 1999 from the World Wide Web: <http://www.census.gov/main/www/popclock.html>.

———. 1995. *Statistical abstract of the United States, 1995*. Washington, D.C.

———. 1993. *1990 Census of Housing: Detailed housing characteristics, Kentucky*. Report no. 1990 CH-2-19. Washington, D.C.

———. 1990. *General population characteristics, 1990*. Washington, D.C.

U.S. Department of Health and Human Services, National Center on Child Abuse and Neglect. 1988. *Study findings: National Study of the Incidence and Severity of Child Abuse and Neglect*. Washington, D.C.

———. 1981. *Study findings: National Study of the Incidence and Severity of Child Abuse and Neglect*. Washington, D.C.

U.S. Department of Justice, Federal Bureau of Investigation. 1960 through 1998. *Crime in the United States*. Uniform Crime Reports. Washington, D.C.

U.S. General Accounting Office. 1990. *Rural drug abuse: Prevalence, relation to crime, and programs*. Washington, D.C.

- Van, Jon. 1997. High tech in the heartland: Intelligence and innovation counted more than technical skill when hungry entrepreneurs created new businesses in small-town Iowa. *Chicago Tribune*, 10 November.
- Verde, Tom. 1998. 90's moonshiners add drugs and guns to the recipe. *New York Times*, 2 February.
- Verhovek, Sam Howe. 1994. 5 rural sheriffs are taking the Brady Law to court. *New York Times*, 25 April.
- Websdale, Neil. 1998. *Rural woman battering and the justice system: An ethnography*. Thousand Oaks, California: Sage Publications.
- . 1995. An ethnographic assessment of the policing of domestic violence in rural eastern Kentucky. *Social Justice* 22:102–122.
- Weingarten, Paul. 1989. Profits, perils higher for today's bootleggers. *Chicago Tribune*, 14 September.
- Weingarten, Paul, and James Coates. 1989. Drugs blaze new paths: Interstates, backroads join courier system. *Chicago Tribune*, 12 September.
- Weisheit, Ralph A. 1997. Marijuana. In *Encyclopedia of rural America: The land and people*, edited by Gary A. Goreham. Santa Barbara: ABC-CLIO.
- . 1993. Studying drugs in rural areas: Notes from the field. *Journal of Research in Crime and Delinquency* 30:213–232.
- . 1992. *Domestic marijuana: A neglected industry*. Westport, Connecticut: Greenwood Press.
- Weisheit, Ralph A., David N. Falcone, and L. Edward Wells. 1999. *Crime and policing in rural and small-town America*. 2d ed. Prospect Heights, Illinois: Waveland Press.
- Weisheit, Ralph A., and Steven T. Kernes. 1997. Future challenges: The urbanization of rural America. In *Community policing in a rural setting*, edited by Quint C. Thurman and Edmund F. McGarrell. Cincinnati: Anderson Publishing Company.
- Weisheit, Ralph A., and L. Edward Wells. 1999. The future of crime in rural America. *Journal of Crime and Justice* 22 (1): 1–26.
- Weisheit, Ralph A., and L. Edward Wells. 1996. Rural crime and justice: Implications for theory and research. *Crime & Delinquency* 42:379–397.
- Weisheit, Ralph A., L. Edward Wells, and David N. Falcone. 1994. Community policing in small-town and rural America. *Crime & Delinquency* 40:549–567.

Wells, L. Edward, and Ralph A. Weisheit. 1998. Rural gangs: Are they a problem? Paper presented at the 1998 Annual Meeting of the American Society of Criminology, 13 November.

Williams, Christopher, ed. 1996. Environmental victims. Special issue. *Social Justice* 23 (Winter).

Wilson, William J. 1987. *The truly disadvantaged*. Chicago: University of Chicago Press.

Wolfner, Glenn D., and Richard J. Gelles. 1993. A profile of violence toward children: A national study. *Child Abuse and Neglect* 17:197–212.

Wren, Christopher S. 1997. The illegal home business: "Speed" manufacture. *New York Times*, 8 July, electronic edition. Retrieved 8 July 1997 from the World Wide Web: <http://www.nytimes.com/yr/mo/day/news/national/crank-addict.html>.

A Century of Juvenile Justice

by Philip W. Harris, Wayne N. Welsh, and Frank Butler

The millennium marks the beginning of a second century for the formal system of juvenile justice in the United States. From its inception, the central focus of the system has been delinquency, an amorphous construct that includes not only "criminal" behavior but also an array of youthful actions that offend prevailing social mores. Thus, the meaning of delinquency is markedly time dependent. Likewise, methods for addressing the phenomenon have reflected the vagaries of social constructions of youth and youth deviance. American juvenile justice was founded on internally conflicting value systems: the diminished responsibility and heightened malleability of youths versus individual culpability and social control of protocriminality. During its first century, the latter generally have become increasingly predominant over the former. Those most caught up in the system, however, have remained overwhelmingly our most marginalized youths, from immigrants' offspring in the early 20th century to children of color in contemporary society. The implications of such theoretical and sociodemographic variations are considered, and their implications are reviewed for public policy beyond mere political symbolism.

Philip W. Harris, Ph.D., and Wayne N. Welsh, Ph.D., are Associate Professors and Frank Butler, J.D., M.B.A., is an Instructor in the Department of Criminal Justice at Temple University.

From the vantage point of those living in the 21st century, perhaps one way the previous century will be recalled is as one in which the state became elaborately involved in issues of youthful deviance in the United States. From the beginning of the 20th century and all the way through to its closure, the discourse of “juvenile justice” has remained prominent, in marked contrast to prior periods.

Traditional societal concern with the need for instilling law-abiding attitudes and behaviors in its young took on new prominence in the 20th century, as elaborate processes were put into place to promote conformity. Government—personified in a special judiciary—was at the helm and remained preeminent as the new juvenile justice “system” voyaged through the uncharted waters of changing social constructions of youth deviance. For most of this time, the seas have remained turbulent, due in large part to inherently contradictory aims of the enterprise: to protect youths and support those in trouble and also to punish youths and protect society from them.

In spite of this basic inconsistency, the juvenile system has been impelled consistently by powerful rhetoric about youths, a rhetoric that is largely mythic but highly politicized. For example, at the beginning of the century, the Progressive agenda of segregating and salvaging youths who defied social mores was underlain, at least in part, by the popular eugenicist goal of discouraging reproduction among the dangerous classes (Haller [1963] 1984). Toward the end of the century, beginning in the late 1970s, responses to juvenile crime toughened much more than can be explained by juvenile involvement in crime. During this period, people over 18 years of age committed a much greater proportion of all crime than juveniles; property crime rates remained much higher than violent crime rates and essentially unchanged; and juveniles continued to comprise small proportions of all arrests. However, vindictive approaches to youth crime reached new peaks during this period. For the most part, public policy has not been strongly related to patterns in delinquency.

One particularly troubling aspect of juvenile justice as it has been constructed throughout the 20th century is its disproportionate involvement, in an aggregate social sense, with youths from the lowest socioeconomic strata, who at least in the latter half of the 20th century overwhelmingly have been children of color. This presents special hazards in eras (such as the “crime control” period that began in about 1980) in which the punitive engines of the system overtake the more reformatory ones (such as existed in the era of “juvenile rights” in roughly the 1960s and 1970s).

This chapter examines multiple forces that have substantially impacted the juvenile justice endeavor during the 20th century. An examination of shifts in

policy and practice over time provides a valuable foundation for envisioning justice for youths in the new century. First, we describe the development of the juvenile justice system, underscoring major eras in its evolution. We then examine trends in four broad areas that have shaped the juvenile justice system: (1) social constructions of childhood and delinquency; (2) the role of criminological theory and measurement; (3) juvenile crime patterns as represented primarily in official reports; and (4) general social, economic, and cultural trends, including patterns of change in the larger criminal justice system. Finally, we examine the possibilities for at least ameliorating some of the seemingly intractable dilemmas of justice for youths.

Creating and Reengineering Juvenile Justice

In the 19th century, a collaboration between the demands of the Industrial Revolution, already operating at full steam, and the sentiments of religious reformers, who sought outlets for their need to save the downtrodden, led to organized efforts to discipline deviant youths deemed not beyond the pale of reformation (Fox 1970). Institutionalization with fellow youthful deviants was viewed as the principal, beneficent intervention needed to inculcate middle-class, Protestant, rural values and ethics among the hordes of immigrant offspring in urban slums. Houses of refuge established to serve the poor evolved into places of incarceration. The prevalent moral view was that pauperism and nascent criminality were mutually reinforcing, such that removal from the family of origin was the preferred pathway to moral regeneration for children of the “dangerous classes.”

Efforts to save wayward youths from the corrupting effects of poverty and vice became increasingly organized, culminating in the institution of juvenile courts, the first of which was established in Illinois in 1899. The majesty of the law could now be used formally to further the efforts of primarily religious agencies to instill nondeviant norms in children who acted—or appeared likely to act—in ways disdained by the majority culture. The normalizing philosophy, which in the early 20th century justified the creation of juvenile courts, contributed heavily to a perspective that has endured in juvenile court jurisprudence: the “best interest” of lower class children entails coercion into middle-class values rather than any sort of serious consideration of more profound issues of distributive or social justice.

In its inception, the juvenile court was not a radical break with past practice. In Illinois, for example, the creation of the court was widely supported by dominant elites (Platt 1977). Vested penological interests, including reform schools

The punitive aspects of the court were hidden under the rubric of enlightened, well-intentioned reform of the child, and criminal trappings were simply defined away through euphemism, e.g., the legal fiction that juvenile court proceedings were civil rather than criminal matters.

and industrial schools, were positioned to profit from the court's jurisdiction, and to this day a wide array of agencies of social control are wholly dependent on the juvenile court's propensity to intrude liberally into the lives of its charges. Despite rhetoric regarding the value of home and family, the court's founders were happy to invoke correctional cures for lower class youths whose families permitted them to engage in behavior judged to be immoral by conventional standards: "drinking, begging, roaming the streets, frequenting dance-halls and movies, fighting, sexuality, staying out late at night, and incorrigibility" (Platt 1977, 139).

With the accession in the early 20th century of "scientific" methods (mainly psychiatry and social work) of exploring human behavior, coupled with social Darwinism and the popularization of positivist criminology, the original religious underpinnings for the juvenile system waned. Positivists confidently identified traits and conditions that were precursors to adult criminality, developing "treatment" modalities to cure

these pathologies among hapless youths. The state as parent, personified in the juvenile court judge, was privileged to exercise solicitude, as well as mete out discipline, by committing increasing numbers of children to the care of professional reformers. The work of the juvenile court was perceived to be in the best interest not only of the child but of everyone (Rothman 1980).

Ironically, in its origins the juvenile court was designed as an appendage to the new social welfare professions. In contrast to the procedural, legal ceremony endemic to adult courts, the juvenile court was to be characterized by mere "ceremonial legality" (Sutton 1985). In its superficial informality, it symbolically projected a nonlegal, solicitous posture toward its youthful clientele. A major theoretical justification for the court's nonlegal or extralegal *modus operandi* was the doctrine of *parens patriae*, traditionally invoked by English chancery courts to prevent waste of property subject to ownership by minors and incompetents. Although chancery did not use *parens patriae* as a basis for any sort of prosecutorial proceedings, American juvenile courts liberally cited it as their jurisprudential foundation, disguising the actual precedents for their activities, namely, police power and the Elizabethan Poor Laws intended to control pauper children (Wizner 1995).

It made little or no difference whether a child was deemed delinquent or merely dependent/neglected. Both were in need of moral cure, and both would profit from the same scientifically approved methods of treatment in the same institutions. In delinquency, the concern was not primarily with the charges but rather with a youth's character, background, and psychological makeup. Essentially, not their acts but their souls were at issue. The discretionary power of the healers to determine the cure and the length of treatment for its effectiveness rendered legal formality pointless. The punitive aspects of the court were hidden under the rubric of enlightened, well-intentioned reform of the child, and criminal trappings were simply defined away through euphemism, e.g., the legal fiction that juvenile court proceedings were civil rather than criminal matters.

Jurisdiction over "status" offenses—an amorphous class of behaviors that were viewed as indicators of future delinquency—provided a rich source of clients for the courts' paternalistic oversight. Although similar behaviors were widely ignored by the legal system when they were exhibited by adults, juvenile courts saw their role as enforcing the dependence of childhood in the face of threats of premature adulthood (Rothman 1980).

The predominant informality of the juvenile courts facilitated wide discretion for juvenile court judges, both in adjudication and disposition. Additionally, deliberately vague statutory definitions of delinquency and dependency allowed the courts to intervene, quite arbitrarily, in an exceptionally broad array of family issues, particularly when the families were of the lower classes and implicitly in need of humanitarian corrective services.

Gradually, and probably heavily influenced by the widespread impoverishment of even the morally upright during the Great Depression, the optimistic outlook that crime reduction could be achieved by treating symptomatic lower class children became suspect (Fox 1970). The juvenile system became recognized increasingly as a mechanism for social control of nascent criminality. Disenchantment with the rehabilitative ideal became apparent as juvenile institutions adopted more emphasis on incapacitation and deterrent technologies. Eventually, the design of the system emerged from the shadows of the *parens patriae* mythology, offending the expansive social conscience that characterized the 1960s.

Legalism as an elixir

Candid condemnation of even the juvenile court, the apex of the juvenile system, was undertaken by no less an authority than the U.S. Supreme Court. Demanding "domestication" of the "kangaroo" juvenile court, the Court premised the possibility of redemption on the incorporation of procedural due process (*In re Gault*,

The late 1970s through the 1990s have witnessed simultaneous, substantial growth in both incarcerative and diversionary approaches to troublesome youths.

387 U.S. 1 [1967]). Notice of charges, the right to counsel, the right to confrontation/cross-examination, and the right against compelled self-incrimination were all formally incorporated into the juvenile court as part of the “due process” revolution of the late 1960s. The Court declined, however, to mandate a constitutional right to jury trial in the juvenile court, fearing that such a step would signal the beginning of the end for juvenile courts (*McKeiver v. Pennsylvania*, 403 U.S. 528 [1971]).

Finally, consistent with the more punitive *Zeitgeist* of the 1980s, the Court rejected sociological data about the futility of predicting future dangerousness and instead held that pretrial detention of juveniles based on “serious risk” does not violate the principle of fundamental fairness required by due process (*Schall v. Martin*, 467 U.S. 253 [1984]). In fact, the Court, by its observation that adolescents were never fully free of adult supervision, reaffirmed the image that adolescence is a subcategory of childhood.

Particularly since the 1980s, the focus of juvenile courts has been on the offense committed (what has been termed the “principle of offense”) rather than on the treatment of the juvenile (Feld 1988). So-called legal considerations (mainly the relative severity of a given offense, coupled with the accused’s official record of past offenses) trump concerns about a youth’s future well-being. Indeed, the essence of the modern juvenile court hearing has been described as “little substance, much legal ritual, all flow control” (Humes 1996). Because the original *raison d’être* for the juvenile court was rooted in individualized rehabilitation, the increased exposure of standardized, punitive dimensions of the court has raised the possibility of simplification by merging juvenile courts with adult criminal courts.

Procedural protections afforded in juvenile court, insofar as they exist, have not necessarily been salutary for juveniles. The adversarial model is now publicly recognized as the core of the juvenile system, yet at least one major study has found that unrepresented juveniles receive less severe dispositions than their counterparts who are represented, even when controlling for relative severity of offense, pretrial detention status, and prior official records (Feld 1993b). Additionally, in spite of the lip service paid to legal representation, substantial proportions of juveniles are unrepresented, and this has not impeded the popularity of “repeat offender” dispositions based partly or wholly on uncounseled prior convictions (Feld 1989).

Considering the community as part of the cure

Although the dominant theme in youth corrections through at least the first half of the 20th century was institution based, the general disaffection for social institutions during the 1960s contributed to approaches based in prevention, diversion, and deinstitutionalization (Miller 1991). Massive Federal funding from the new Law Enforcement Assistance Administration in the 1970s encouraged a proliferation of programs designed to spare redeemable youths the formality and stigma of the juvenile court. The 1974 Juvenile Justice and Delinquency Prevention Act placed great emphasis on community-based treatment, and it included a prohibition against incarcerating status offenders in secure detention and correctional facilities. Deinstitutionalization became fashionable, though it was reserved largely for status offenders. Nonincarcerative settings included group homes, nonresidential therapeutic communities, day treatment centers, and wilderness programs. Evaluations of such programs, however, have failed to demonstrate appreciable reductions in youth deviance (Welsh, Harris, and Jenkins 1996).

The late 1970s through the 1990s have witnessed simultaneous, substantial growth in both incarcerative and diversionary approaches to troublesome youths. At least two meta-analyses have been undertaken. In a study of 90 community-based programs, it was found that the most effective were those that were most intense, most closely monitored for implementation problems, most community oriented, and most focused on developing specific life skills (Gottschalk et al. 1987). Another study of 44 juvenile and 23 adult treatment programs concluded that effectiveness depended largely on delivering appropriate services to higher risk individuals, targeting criminogenic needs, and matching intervention with client needs and learning styles. What the authors deemed inappropriate services increased subsequent deviance if they were delivered in the residential rather than community setting (Andrews et al. 1990).

The proliferation of the treatment industry that is an appendage of the juvenile court has also included specialized programs that increasingly are based on medical models. For example, specialized programs for youthful drug offenders and sex offenders purport to reduce such antisocial tendencies. The full panoply of the health care industry—from accreditation through the Joint Commission on Accreditation of Healthcare Organizations to insurance arrangements through managed care—is finding untapped markets in youthful deviance. Privatization of services is becoming increasingly common in areas such as drug treatment, foster care, and education as for-profit corporations realize the lucrative potential in youth corrections on which they have already capitalized in adult corrections.

This evolving coexistence of contradictory goals, such as treatment and punishment, is exemplified by the National Juvenile Justice Action Plan, part of the Office of Juvenile Justice and Delinquency Prevention's (OJJDP's)

Comprehensive Strategy for Serious, Violent, and Chronic Juvenile Offenders (Wilson and Howell 1993). One objective of this plan is to provide immediate intervention and appropriate sanctions and treatment for delinquents. The SafeFutures project funded under this objective seeks collaboration among juvenile authorities, health and mental health providers, educators, and neighborhood boards. A second objective is the prosecution of serious, violent, and chronic juvenile defendants in criminal court. For example, OJJDP funds research on waiver mechanisms. A third objective, the reduction of youth involvement with guns, drugs, and gangs, invokes the stereotypical trilogy of urban youths. Funding under this objective includes the Boston Violence Prevention Project, the National Youth Gang Suppression and Intervention Program, the Comprehensive Response to America's Youth Gang Initiative, the National Youth Gang Center, and the Boys & Girls Clubs of America's Gang Prevention through Targeted Outreach. A fourth objective involves providing educational and mentoring opportunities for youths considered at risk. Included here are programs such as the Violence Prevention Curriculum for Adolescents, the Program for Youth Negotiators, peer mediation programs, Positive Action Through Holistic Education (PATHE), and Juvenile Mentoring Programs (JUMP). Finally, a fifth objective is to address youth victimization, abuse, and neglect, for which OJJDP funds programs such as Safe Kids/Safe Streets (family service agencies), the Healthy Start program (comprehensive child health services in infancy and early childhood), and the Yale/New Haven Child Development–Community Policing Program.

This brief discussion of juvenile justice history suggests four eras that can be distinguished by dominant policy themes: (1) the Refuge Period (1824–98), (2) the Juvenile Court Period (1899–1960), (3) the Juvenile Rights Period (1961–80), and (4) the Crime Control Period (1981–present). The latter era is evolving into a more complex policy period as Federal, State, and local authorities attempt to reconcile divergent policy paths. As we discuss the broader set of forces that have helped to shape the juvenile justice system, we will link trends in these forces to these periods.

The Social Constructions of Childhood and Delinquency

Underlying the development of the juvenile justice system are disturbing images of children as victims and children as offenders. These images are structured in terms of two evolving social constructs that directly influence social responses to juvenile delinquency: the meaning of childhood and the meaning of delinquency. The meaning of delinquency, of course, is to a great extent a consequence of how society defines childhood. Even today, the legal

and psychological communities grapple with the relationship between theories of child development and the boundary separating criminal from delinquent, seeking ways to shield young people from unfair treatment by the justice system and resolve bothersome contradictions in youth policy.

In the past few years, the United States has experienced an explosion of punitiveness directed at its young. Between 1983 and 1995, the percentage of juveniles held in public facilities increased by 47 percent (Sickmund 1997). Moreover, at the end of this period, nearly every State revised its juvenile justice legislation, increasing the range of offenses eligible for juvenile court exclusion, reducing the confidentiality of juvenile court proceedings and records, and more clearly linking sanctions to offenses (Szymanski 1997; Torbet et al. 1996). These changes, since they occurred so rapidly across the Nation, suggest a new image of the juvenile delinquent, but one that has yet to be articulated.

The meaning of childhood

Our concepts of childhood and adolescence have developed since the inception of the juvenile court, as has knowledge regarding child and adolescent development. Earlier images of the child as innocent and in need of adult protection have given way to views that are more complex and that have resulted in social contexts that are both more permissive and more demanding. Today's children have access to information previously regarded as harmful, and they command a significant share of the marketplace. The children's rights movement and tentative parenting of the 1970s, or the Juvenile Rights Period, have been replaced by a theme of individual accountability in the 1990s (Bazemore 1992; Torbet et al. 1996). Simultaneously, expectations of parents, children, and adults generally occupy a more prominent place in policy discussions regarding delinquency and adolescent substance abuse. Parents, teachers, and even adult neighbors are being encouraged to exercise more control over our young.

Scholars who have examined the history of juvenile justice agree that childhood is "better seen as a social fact than a biological one" (Ainsworth 1999, 8; see also Empey 1978; Aries 1962). Childhood is an invention. The practice of carving up human maturation into distinct stages, and then attaching to different stages different amounts of cultural capital, extends well beyond the science of human biology. Aries' (1962) historical account of childhood informs us of the apparent lack of distinction between child and adult in medieval society. No effort was made to protect children from the social life of adults; no perceived reason for protection had yet emerged. The notion of the innocence of children would come later.

Ainsworth (1999) notes the contradiction between Calvinist doctrine of being born into sin and thus doomed to eternal damnation and the philosophy of the Enlightenment that saw children as pure and innocent and thus in need of protection and nurturing. The former view suggests the need for salvation, whereas the latter implies the need to avoid noxious, criminogenic influences in the environment until the immunization brought on by proper socialization can withstand the forces of evil. Underlying both of these images of childhood was the notion that children are different from adults and that adults play a role in shaping who they become. The contest between these two views was played out in the facilities known as Houses of Refuge that proliferated under the watchful eyes of sectarian organizations during the 19th century. Although primarily intended to serve the poor, their roles as child care enterprises evolved as interest in the deleterious effects of burgeoning urban areas grew (Empey 1978).

Around the time of the creation of the juvenile court, the structuring of childhood continued with renewed vigor. The "child study" movement not only produced more complex descriptions of stages of development, but became formalized as universities established departments of child development and as medicine developed its field of pediatrics (Ainsworth 1999).

Important for juvenile justice, the developmental stage of adolescence emerged as a means of describing persons who are developmentally between childhood and adulthood. Marking this boundary became the focus of policy development, most vividly expressed in child labor laws and compulsory school attendance laws. Preoccupation with controlling persons perceived to be a threat to the social order, by virtue of their physical size and lack of maturity, resulted in the stretching of the length of childhood and the consequent economic dependency of teenagers, creating even greater demands for formal social control. From a justice system perspective, society elected to classify adolescents as a subclass of children, as opposed to adults, and thus chose to not hold teenagers accountable for their behavior. As stated by Ainsworth (1999, 12), "to the advocates of the juvenile court, the essential difference between the moral and cognitive capacities of the juvenile and those of the adult did not serve merely to mitigate juvenile culpability for breaking the law, but also to absolve the juvenile completely from criminal liability." Once committed to a strategy of control over this vibrant segment of society, control became an obsession. The juvenile court, with its doctrine of *parens patriae*, became the ultimate tool of control. Without the constraints of due process, the juvenile court judge was free to prescribe forms of "treatment" that would bring about changes in behavior and lifestyle. Social construction is ultimately a utilitarian enterprise. By the mid 1960s, the image of adolescence that had animated the juvenile court since its creation had been rendered impotent. The shift from a rehabilitative ideology to one based on retribution did not occur in response to changes in our beliefs about the causes

of delinquent behavior; rather, this change occurred in response to a general disillusionment with our capacity to rehabilitate and our fear of the potential harm brought about by the actions of teenagers. Policymakers chose to give up on *parens patriae*, on seeing adolescence as a subset of childhood, because the strategy of treatment failed to control the behavior of unruly teenagers. Gradually, adolescence was reclassified as a subset of adulthood, and retributive principles were again viewed as appropriate in assigning sanctions in juvenile cases.

Legislative bodies have not been alone in the reconstruction of adolescence; the courts have tackled several critical questions pertaining to the rights and responsibilities of children and parents. The Supreme Court decisions of the 1960s implied that children were persons deserving of the same constitutional protections available to adults, including free speech, due process rights, and making important decisions (Gardner 1995). Other decisions reinforce the authority of parents and school administrators, including mature minor provisions regarding the requirement of parental consent to receive nonemergency medical care, especially birth control, abortion, and substance abuse treatment. Inconsistencies among these decisions regarding the autonomy of adolescents underscore the ambivalence of policymakers about the nature of adolescence itself.

The form of punishment adopted during the latter part of the Crime Control Period (1980 to the present) has been a modified version of that found in the criminal courts. We say modified, because competency development, a component of the “balanced approach” that has replaced the rehabilitation mission of many juvenile court statutes, has been incorporated as an aim of most recently adopted juvenile court acts (Bazemore 1992). The balanced approach comprises consideration for public safety, offender accountability, and competency development of the offender, with public safety being an overriding concern. More weight is now given to the needs of the victim in crafting sanctions, and, in practice, restitution has received renewed emphasis. Competency development, according to this schema, has to do with increasing the ability of the offender to play socially acceptable roles through education, vocational training, and improvements in social skills. A lack of competence, however, is not a defense against accountability.

The violent juvenile has been a regular news feature for more than a decade.

Although the problems of guns and violence require attention, they distract the public from the fact that violent youths are not the norm.

In contrast to this emphasis on accountability are recent reactions to the school shootings in Littleton, Colorado, and elsewhere. Discussions among legislators and citizens reported by the media suggest that communities are rethinking the amount of autonomy that should be extended to adolescents. This instability of the social construct of adolescence mirrors the ambivalence that adults have regarding the application of informal mechanisms of social control to youths who are nearing adulthood.

Recent literature on adolescence suggests that moral panic characterizes adult reactions to every new generation of adolescent (Bernard 1992; Brendtro and Long 1994; Moore and Tonry 1998; Austin and Willard 1998). According to Austin and Willard (1998, 1):

“Youth” becomes a metaphor for perceived social change and its projected consequences, and as such it is an enduring locus for displaced social anxieties. Pronouncements such as “the problems of youth today,” used as a scapegoat for larger social concerns, objectify and reify young people *as the problem in itself*. (emphasis in original)

The images that are shaping juvenile justice are even more threatening. Gangs, some of them national in scope; drug trafficking; drive-by shootings; and guns have been linked, often in ways that are unsupported by research findings, to support the image of the superpredator (DiIulio 1996). Although DiIulio has

been criticized for promoting this view of the juvenile delinquent (see, e.g., Howell 1997, 195), such images are not new. The violent juvenile has been a regular news feature for more than a decade. Although the problems of guns and violence require attention, they distract the public from the fact that violent youths are not the norm. The business of juvenile justice is more about young people who are like delinquents have always been and the families, schools and neighborhoods that shape their lives.

Definitions of delinquency interweave criminal behavior and individual characteristics. That is, the status of delinquent has traditionally been attributed to individuals on the basis of life conditions, the offense being less significant than the larger set of circumstances.

The meaning of delinquency

The early years of the juvenile justice system relied heavily on the Christian metaphor of salvation (Platt 1977). Children of the poor were viewed as being raised in home and neighborhood environments in which proper parenting was absent, parents were uncaring, homes were unfit for raising children, and neighborhoods were hotbeds of immorality and vice

(Schlossman and Sedlak 1983). Since delinquency has traditionally meant more than criminal behavior, and because the salvation metaphor fell to the influence of science, more recent discussions of prevention and treatment have relied on medical analogies and metaphors of science, implying that delinquency was some sort of illness (Asquith 1983). With salvation and rehabilitation serving as philosophical options, the juvenile justice system was not designed to consider conduct alone as the proper subject of its decisions.

Beginning in the 1960s—the Juvenile Rights Period—developments in the sociology of deviance shifted the focus of criminology away from the causes of delinquency to the machinery of justice and the actions of its agents. Labeling theory and research on discretion led many criminologists and policymakers to conclude that the search for causes of delinquency was futile. Moreover, deviance theorists argued that the real purpose of the juvenile justice system might have more to do with the ideological views and political dynamics of these systems of social control than with their stated noble aims.

The fact that the juvenile court process derived from criminal justice and has come to resemble criminal court processing presents the juvenile justice system with a problem. The court process must view the individual offender as a rational, responsible person, but the correctional process assumes pathology or lack of socialization (Duster 1987). During the 1970s, when rehabilitation suffered its greatest defeats, juvenile correctional programs remained faithful to their rehabilitative aims. All of the actions against rehabilitation occurred within the context of the court; corrections remained largely untouched by the changes that were taking place in the larger arena of juvenile justice. The tension between these perspectives reflects the ambivalence of our culture with regard to its adolescents. Their unequal status in comparison to adults is well established, but adult authority structures have been reluctant to assume responsibility for their behavior (Empey and Stafford 1991).

Definitions of delinquency interweave criminal behavior and individual characteristics. That is, the status of delinquent has traditionally been attributed to individuals on the basis of life conditions, the offense being less significant than the larger set of circumstances. During the Crime Control Period, with juvenile offending regarded as a serious threat to public safety, the court became more offense focused, both in terms of evaluating cases and in terms of imposing sanctions. Graduated sanctions are now accepted as proper within the juvenile court, where once the offense played a relatively minor role. Additionally, the expanded use of waivers emphasizes the importance of the offense in judging the appropriateness of a youth for delinquency programs. This trend has been supported by an explosion of legislation and by recent case law that have articulated an end to rehabilitation as the central aim of juvenile justice.

Status offenses, which were largely ignored in recent years, have now become causes for referral to prevention and diversion programs and tools for maintaining social boundaries (Krisberg and Austin 1993). Distinguishing status offenses from delinquent offenses became a critical policy issue in the 1970s, largely due to attacks on the unfairness of sanctioning both categories of behavior as if they were equal. The recent revival of interest in status offenses during the Crime Control Period suggests that the traditional role of the juvenile justice system, although not necessarily involving the court, continues to have merit. That is, although status offenses continue to be seen as less serious than delinquent offenses, ensuring that children attend school, respond appropriately to parental authority, and reside at home can prevent delinquent behavior. This policy trend suggests that communities are beginning to increase the exercise of adult authority over the lives of young people.

The Role of Theory and Measurement

The social construction of delinquency has, to some degree, been influenced by the contributions of modern criminology. In other words, scientific methods have had some bearing on how we think about delinquency and respond to it. However, as we argue throughout this chapter, major shifts in juvenile justice policy only occasionally correspond to observable patterns in delinquency or new developments in theory. It would be a grand illusion to suggest that delinquency theory and measurement are the only, or even major, determinants of juvenile justice policy.

At the same time, however, methods of delinquency measurement and attention to statistical data have gradually assumed greater prominence both in delinquency theory development and juvenile justice policymaking. Delinquency theorists and juvenile justice policymakers simply do not pay attention to the same information at the same time with the same emphases.

The study of delinquency gained momentum during the Refuge Period (1824–98) with a shift toward *positivism* in science (i.e., an emphasis on observable, measurable events and behavior; an attempt to discover causal relationships assumed to exist in nature). Positivism was a reaction to earlier “classical” criminology that emphasized human rationality and the need to encourage people to responsibly exercise their free will. Although delinquency-specific theory during this period is scarce, juvenile justice advocates at that time were focused on providing large numbers of homeless and neglected delinquents with shelter, food, and discipline and teaching good work and study habits. The negative effects of the environment, they believed, could potentially be ameliorated through intervention.

Positivist criminologists began to increasingly argue three points: (1) delinquency was strongly influenced by physical, mental, and social factors; (2) delinquents were different from nondelinquents; and (3) science could be used profitably to discover the causes of delinquency and reduce it (Vold, Bernard, and Snipes 1998). Two implications of this emerging perspective were that any theory of delinquency should be based on measurable, observable behavior and that any intervention, including punishment, should be tailored to the individual needs of the offender. Major shifts in juvenile justice over time can be linked to this ongoing tension between positivist and classical principles.

Much delinquency research during the Juvenile Court Period (1899–1961) (e.g., Glueck and Glueck 1950; Shaw and McKay 1942) struggled to uncover major, observable, generalizable patterns in delinquent behavior. This is not to say that such work was atheoretical, but “. . . their essential contribution was a set of hard-won, reliable facts necessary to a scientific criminology” (Gottfredson and Hirschi 1987, 19).¹ The Juvenile Court Period was also characterized by several influential theoretical contributions derived largely from major sociological and philosophical perspectives. These included Cohen’s (1955) *Delinquent Boys* and Cloward and Ohlin’s (1960) *Delinquency and Opportunity*.

During this period, positivist criminologists championed the ability of scientists to discover and change the biological, psychological, and social correlates of delinquency. The medical model dominated thinking about crime and delinquency for much of this period, including belief in the possibility of prevention and cure (rehabilitation).

The most sophisticated early attempts to measure and understand delinquency grew out of the “Chicago School” research of the 1920s (e.g., Park, Burgess, and McKenzie [1925] 1967; McKenzie 1925). Such studies, as James Short (1998, 6) notes, were groundbreaking in their rich descriptions of delinquent lives, including but not limited to juvenile involvement in criminal activities: “[T]he Chicago School developed a sensitivity to process—ecological processes, organizational and institutional processes, processes of identity formation and group processes—processes by which we become human and function as human beings.” Whereas earlier ecological research (e.g., Thrasher 1927) undertook detailed qualitative research, including participant observation of delinquent gangs, later research (e.g., Shaw and McKay 1942) relied increasingly on official statistics (e.g., arrest rates and dispositions) to measure and study delinquency.

Shaw and McKay developed quantitative measures to test the social disorganization theory developed by Burgess ([1925] 1967) and others. Their theory had two main components. First, people compete for desirable space in a city. There was an economic advantage associated with being near the marketplace,

and most cities grew around the marketplace. Second, levels of social organization and integration varied in different communities, with corresponding effects on the socialization and behavior of youths.

They found that crime rates were highest near the center of the city and tended to decrease as one moved outward. Their explanation centered on changes in the physical environment and resultant impacts on the social behavior of residents. As the central city became too crowded and too expensive, stable businesses and residents moved out. The resulting area around the central city became a zone in transition, characterized by high mobility, social disorganization, and high rates of delinquency. They were struck by the stability of crime rates in particular communities over time, even after considerable population turnover. More recent ecological research has focused on measuring social cohesion and disorganization in different communities, as well as on other variables hypothesized to mediate the effects of community characteristics (e.g., high rates of poverty and mobility) on crime rates (e.g., Bursik 1988; Bursik and Grasmick 1993; Sampson and Lauritsen 1993; Sampson, Raudenbush and Earls 1997).

Shaw and McKay believed that a major contribution of their work was the demonstration that observed relationships between community racial composition and delinquency rates had more to do with *social structure and change* than individual motivation. Arguments by the original ecologists focused on the competition for desirable resources, including land (McKenzie 1925). Segregation was a result of competition among different groups, with European immigrants who had been in the city the longest competing most favorably. The African-American economic experience was unique because of persistent discrimination in spite of post-Civil War emancipation and reconstruction.

Few works have had greater influence on delinquency research and theory than Shaw and McKay's (Bursik 1988). As Gibbons (1979, 44) puts it, "Shaw and McKay's findings were incorporated into the background assumptions on which various sociological theories of crime and delinquency were subsequently constructed." For example, social disorganization theory was the macrolevel precursor to Hirschi's (1969) individual-level control theory (Messner and Rosenfeld 1997). Finestone (1976, 1977) illustrates how virtually all theoretical and empirical work in the field of criminology since 1929, including subcultural theories, learning theories (e.g., differential association), labeling theories, and social process theories, can be traced as extensions of or reactions to the research conducted by Shaw and McKay.

In the early part of the Juvenile Rights Period (1961–80), the importance of social and cultural influences on delinquency gained prominence for a time,

largely as a result of the emergence and appeal of Cloward and Ohlin's (1960) differential opportunity theory and accompanying social interventions under the Johnson presidency such as the war on poverty and the Great Society (e.g., education, job training, skills training, community resource centers). Like the earlier human ecologists, Cloward and Ohlin argued that individual motivations did not by themselves explain delinquency. Instead, the individual must be in a deviant or conforming environment that allows him or her to learn requisite skills and abilities. The deprivation of legitimate means produces a strain toward delinquency, but behavioral adaptations can take many different forms, depending on exactly what specific illegitimate opportunities are available in the environment. Legitimate opportunities may be blocked, but illegitimate ones must be available before the individual can choose one or the other. If delinquency emerges because of unequal opportunity and the widespread availability of illegitimate opportunities, then the clear policy implications of this theory are that alternatives to delinquent subcultures and illegitimate opportunities must be provided.

Labeling theory also garnered attention during the 1960s and 1970s, leading to policy emphases on prevention, diversion, and even deinstitutionalization. Labeling theory focuses on the informal and formal application of stigmatizing labels by various persons on those who misbehave. Secondary deviance emerges when one engages in additional deviant behavior attributable to stigmatization and changes in self-concept rather than the original deviant behavior. The perspective caught on, leading to a widely shared assumption that established systems of control produced more crime than they prevented (Empey 1978). The juvenile diversion movement of the 1970s was in large part attributable to the influence of labeling theory.

Labeling theory has at least partly guided more current theories, including Braithwaite's (1989) concept of reintegrative shaming. Reintegrative shaming describes processes by which a deviant is labeled and sanctioned but brought back into the community of law-abiding citizens through various words, gestures, or rituals. The stigmatization or "deviance amplification" process, in contrast, occurs only when no attempt is made to reconcile offenders with their communities. This perspective incorporates variables from various other theories (e.g., control theory and social learning theory), though, and certainly cannot be categorized as a recycled version of labeling theory.

Compatible with labeling theory is the view that most delinquent behavior occurs within the context of normal adolescent development. Even very high-rate offenders (a small fraction of all delinquents) do not engage in delinquent behavior all the time. The great majority of juveniles are engaged in normal, law-abiding behaviors most of the time (Matza 1964). Many juveniles "drift"

into occasional delinquency when social controls are weakened (Matza and Sykes 1961; Sykes and Matza 1957), but most age out of delinquency entirely as they approach adulthood.

The popularity of theories that shifted responsibility from individuals to criminogenic environments was partly attributable to widely held views of the time that agents of social control were often unfair, negligent, or even brutal. By the early 1980s, the pendulum had shifted toward more conservative crime-control policies, and interest in opportunity and labeling theories faded (see the concluding section of this chapter).

Sophistication in measuring delinquency has improved greatly since 1960, and delinquency studies have become increasingly informed by the empirical measurement and observation of behavior. Although all measures still retain certain limitations, we are, in general, able to better control for measurement error through developments in statistical and analytical techniques as well as large probability samples. Ideally, many believed,² ongoing advances in the measurement of delinquency would advance the development of both useful theories and effective policies. Positivist ideals strongly influenced delinquency theory and policy development during the Juvenile Rights Period.

Four broad types of public institutions collect delinquency data (Reiss and Roth 1993, 37): (1) the criminal justice system, (2) the juvenile justice system, (3) social services (e.g., mental health, alcohol and drug abuse, physical and sexual abuse), and (4) the public health system (e.g., injuries and deaths due to different causes). The first two are used most often to study delinquency patterns and causes.

Since the appearance of Short and Nye's (1958) groundbreaking study, self-report data have increasingly been used to study delinquency (Farrington 1973; Farrington et al. 1996; Hindelang, Hirschi, and Weis 1981; Huizinga and Elliott 1986). Self-report measures of delinquency became particularly popular in the 1960s, exemplified by Hirschi's (1969) conceptualization of control theory and its accompanying self-report scales. Further development of individually oriented theories (e.g., social learning theories) led to exponential growth of delinquency self-report measures.

Although considerable variation in delinquency is reported depending on items used (e.g., type and seriousness of behaviors), sampling strategies, and technique (e.g., survey versus interview), self-report delinquency measures offer several advantages. Self-report measures, like victimization measures, can detect crimes that were not reported to police. Most important, self-report measures can ask various causal questions related to individual motivations for committing a crime, including questions about attitudes, peer associations,

family structure and relationships, and socioeconomic status. Although greater attention to reliability and validity issues is still needed, self-reported delinquency measures have often demonstrated good concurrent and predictive validity in relation to criteria such as juvenile court petitions (Farrington et al. 1996; Huizinga and Elliott 1986).

Although the tension between classical and positivistic criminology has never completely abated, and the hegemony of either has never been complete, delinquency studies at the dawn of the 21st century remain heavily focused on measuring delinquency and determining its causes (Gottfredson and Hirschi 1987). In this regard, the positivist ideal of empirical measurement and observation of behavior remains the guidepost of scientific inquiry, but positivistic faith that causes of delinquency beyond the boundaries of the individual can be *changed* has weakened.

Research and policy during the Crime Control Period (1981 to the present) has shown a renewed emphasis on classical principles (e.g., holding juveniles accountable for the choices they make; emphases on deterrence, incapacitation). According to classical views, it is society's responsibility to make sure that perceived costs of crime (as embodied in criminal laws, processing, and punishment) outweigh the benefits, so that a "rational" person will conform because it is in his or her own best interests to do so. Examination of the effects of laws and justice system responses on human behavior is nothing new; it is only the emphasis that changes over time. Classical ideals of rationality and individual accountability have increasingly regained a hold on juvenile justice policy and delinquency research.³

At the same time, this particular period witnessed some of the most important developments in delinquency measurement and theory since 1900. Next, we outline several of the major developments during this period.

Improvements in measurement

Multiple measures of delinquency, subjected to higher degrees of scrutiny for reliability and validity, continue to be emphasized. Continued improvements in information systems and collection over time have made it increasingly possible to employ new measures of delinquency and its correlates, to examine linkages between different influences of delinquency, and to monitor intervention process and outcome over time (see Welsh and Harris 1999, ch. 7).

Standardized definitions and measures of youth violence obtained through self-reports are greatly enhancing our ability to make regional comparisons of delinquency and test theories across different sites. In OJJDP's multisite, longitudinal causes and correlates of delinquency study, researchers employ the same core

measures across three sites (Denver, Rochester, and Pittsburgh). For each site, researchers collect data on delinquent behavior, drug use, juvenile justice system involvement, community characteristics, family experiences, peer relationships, educational experiences, attitudes and values, and demographic characteristics. Self-report data collected in 1987 and 1988 produced higher estimates of juvenile involvement in violent crime than estimates based on official statistics: 12 to 20 percent of males ages 13 to 16 reported committing acts of serious violence (including aggravated assault, robbery, rape, or gang fights) in the previous year (Kelley et al. 1997).

The National Youth Survey (NYS) has become one of the best known and widely used sources of self-reported delinquency data (Elliott, Huizinga, and Ageton 1985; Elliott, Huizinga, and Menard 1989). NYS is a 5-year panel study of a national probability sample of 1,726 persons ages 11 to 17 in 1976. These adolescents were interviewed in 5 successive years (1977–81), and later at 3-year intervals. Nine waves of data are now available on this panel, whose subjects were ages 27 to 33 when last interviewed in 1993 (Elliott 1994). Both self-report and official record data are available for respondents, and official record data are available for parents or primary caretakers (Elliott 1994). Data are available on a wide variety of variables, including the demographic and socioeconomic status of respondents, parents and friends, neighborhood problems, education, employment, skills, aspirations, encouragement, normlessness, attitudes toward deviance, exposure to delinquent peers, self-reported depression, delinquency, drug and alcohol use, victimization, pregnancy, abortion, use of mental health and outpatient services, violence by respondent and acquaintances, use of controlled drugs, and sexual activity. Important findings regarding delinquency patterns deserve brief attention (see Elliott 1994). For example, females were found to be involved in a much higher proportion of crime than previously estimated by the Uniform Crime Reports (UCR). Although UCR reported eight males to every one female arrested for serious violent crime, NYS found a much smaller gender differential that increased gradually over time: only 2 to 1 at age 12, 3 to 1 by age 18, and 4 to 1 by age 21. Race differentials were also smaller using NYS data. While UCR reported 4 African-American males for every white male arrested for a serious violent crime, NYS reported an offending ratio of only 3:2. NYS also found a much earlier age of onset for violent offending (14–17) than previous estimates provided by official statistics (18–24). NYS has found a consistent progression to more serious acts of delinquency over time. For example, aggravated assault preceded robbery in 85 percent of cases and rape in 92 percent of cases (Elliott 1994).

Developmental and life-course perspectives

Criminologists have often preferred to study differences among groups of offenders, rather than changes in individual offending over time (LeBlanc and Loeber 1998). As a consequence, we know little about changes in individual rates of offending, both increases and decreases, over the life cycle. Similarly, we do not know whether causes are invariant through the life cycle, or whether different sets of causes operate for offenders at different ages, developmental stages, and life transitions. Greater focus on longitudinal measurement of delinquency and its causes fueled greater interest in developmental and life-course theoretical perspectives in the 1990s. Longitudinal research has a rich tradition in criminology (Farrington 1998), and more recent research has focused more on elaborating, integrating, and testing different aspects of the developmental process.

The life course can be defined as pathways through the age-differentiated life span. Researchers are interested in the prevalence, frequency, and onset of offending, as well as different developmental pathways to delinquency. Age differentiation carries different implications for expectations and options, decisional processes, and the course of events that shape critical life stages, transitions, and turning points (Elder 1985). Researchers ask questions such as: How do early childhood characteristics (e.g., antisocial behavior) lead to adult behavioral processes and outcomes? How do life transitions (e.g., shifts in relationships from parents to peers, transitions from same-sex peers to opposite-sex peers, transitions from attending school to beginning work, marriage, divorce, etc.) influence behavior and behavioral choices? How do offending and victimization interact over the life cycle?

Three sets of dynamic concepts are important to this perspective: (1) activation, (2) aggravation, and (3) desistance (LeBlanc and Loeber 1998). Activation refers to the ways that delinquent behaviors, once initiated, are stimulated, and the processes by which the continuity, frequency, and diversity of delinquency are shaped. Three types of activation are possible: (1) acceleration (increased frequency of offending over time), (2) stabilization (increased continuity over time), and (3) diversification (propensity of individuals to become involved in more diverse delinquent activities). Aggravation, the second dynamic process, refers to the existence of a developmental sequence of activities that escalate or increase in seriousness over time. Desistance, the third process, describes a slowing down in the frequency of offending (deceleration), a reduction in its variety (specialization), or a reduction in its seriousness (de-escalation).

This perspective has two distinct foci (LeBlanc and Loeber 1998): (1) a descriptive analysis of the development and dynamics of offending with age, and (2) identification of causal factors that precede or co-occur with behavioral

development and influence its course. Researchers thus seek not only to describe the three types of behavioral change listed above, but to identify causal influences of each of the three types of behavior at different ages.

Illustrative of the contributions of this perspective to understanding delinquency is the Pittsburgh Youth Study (Browning and Loeber 1999). The study has followed 1,517 inner-city boys since 1986. Researchers found significant racial differences in serious delinquency, with prevalence at age 16 reaching 27 percent for African-Americans and 19 percent for whites. As prevalence increased, so did the average frequency of serious offending. Onset was also earlier for African-Americans, with 51 percent compared with 28 percent of whites committing serious delinquent acts by age 15. Generally, less serious problem behaviors preceded more serious problem behaviors, although the sequence of life events leading to serious delinquency was not always identical. Researchers identified three major pathways that represented conceptually similar groupings of offenses. The *authority conflict* pathway describes youths who exhibit stubbornness prior to age 12, then move on to defiance and avoidance of authority. The *covert* (or concealing) pathway includes minor covert acts initially, such as lying, followed by property damage and moderate delinquency, then serious delinquency. The *overt* (or confrontive) pathway includes minor aggression followed by fighting and increasing acts of violence. Researchers also examine how different risk factors at the individual, family, and macro levels interact to influence developmental pathways. Although these interactions are complex (e.g., different risk factors become more or less prominent at different ages, and interact with one another in different ways), several patterns can be summarized. Both impulsive judgment and impulsive behavior were significantly, positively related to delinquency, even controlling for differences in IQ and socioeconomic status. However, impulsivity interacted with poverty to increase serious delinquency. In addition, low IQ exerted significant, independent effects on delinquency. Of the family risk factors examined, poor supervision was the strongest predictor of delinquency, followed by poor parent-son communication and physical punishment. The strongest macrolevel predictors were receipt of public assistance (welfare), followed by low socioeconomic status.

As LeBlanc and Loeber (1998) note, the developmental or life-course perspective is building momentum in criminology (see also Thornberry 1997). This approach, they argue, allows for the testing of specific questions critical not only to crime theory but to crime prevention policy. Needless to say, this perspective offers a rich but complex research agenda that is itself in an early but vigorous stage of development.

Risk and protective factors

Other important trends include increased interests in *risk* and *protective* factors and community involvement in delinquency prevention strategies (e.g., Communities that Care, SafeFutures). The risk approach gained momentum during the past 10 to 15 years. Growing out of the public health perspective, risk factors can be defined as statistical or conditional probabilities that are associated with victimization or offending. "Risk" is indicated when certain factors, such as gender (being male), elevate the likelihood of delinquent behavior. "Protection" is indicated when certain factors, such as being raised in a two-parent rather than single-parent family, lower the likelihood of delinquent behavior.

Research has consistently documented certain risk factors for violent juvenile offending (Greenwood 1992; Hawkins and Catalano 1995; Howell 1995; Reiss and Roth 1993; Roth 1994). At the individual level, risk factors include pregnancy and delivery complications, hyperactivity, concentration problems, restlessness, risk-taking behavior, early aggressiveness, early involvement in other forms of antisocial behavior, and beliefs and attitudes favorable to deviant or antisocial behavior. Family factors that increase risk include delinquent siblings, criminal behavior of parents, harsh discipline, physical abuse or neglect, poor family management practices, low levels of parent-child involvement, high levels of family conflict, parental attitudes favorable to violence, and separation of the child from family. School factors associated with higher risk include academic failure, low commitment to education, truancy, early dropout, frequent changes of schools, association with delinquent peers, and gang membership. Community or neighborhood risk factors include high population density, high residential mobility, high poverty rate, availability of weapons and drugs, and high rate of adult involvement in crime.

The prototypical risk-based approach, the Social Development Strategy (Catalano and Hawkins 1996; Hawkins and Catalano 1992; Howell 1995), has been widely applied and adapted to juvenile justice and human services settings. In fact, OJJDP adopted this approach as the foundation for its *Comprehensive Strategy for Serious, Violent, and Chronic Juvenile Offenders* (Wilson and Howell 1993). According to this approach, delinquency and substance abuse can be reduced by enhancing known protective factors. Healthy beliefs and clear standards for behavior in the family, school, and community (i.e., "protective" factors) directly promote healthy behavior in children. By encouraging bonding with people and institutions (families, peer groups, schools, and communities) that promote healthy beliefs and clear standards, the model suggests, youths will be encouraged to adopt similar beliefs and

standards. Individual characteristics (e.g., prosocial orientation, intelligence, resilient temperament) affect a child's ability to perceive opportunities, learn skills, and obtain recognition. The Social Development Strategy is directly derived from control theory and social learning theory (Catalano and Hawkins 1996; Hawkins and Catalano 1992).

Many delinquency prevention programs have been based on this approach (Howell 1995). For example, community-based delinquency prevention programs promote bonding to prosocial individuals and institutions by providing opportunities, skills, and recognition (Welsh, Jenkins, and Harris 1999). Programs:

- Stress the value of supervised activities to keep youths out of trouble.
- Provide some form of life skills training (e.g., problem-solving skills, conflict resolution, and cultural diversity and awareness training).
- Provide homework or tutoring assistance.
- Offer structured recreation and/or field trips.
- Provide career development or vocational training.
- Often include a community service component.

Despite abundant evidence that crime is related to time, place, culture, and social structure, delinquency research over the past century has heavily emphasized individual offenders' motivations.

Some risk factors can be modified to reduce the odds of specific acts or events occurring. There is always a chance, however, that delinquency will still occur in a low-risk setting or fail to occur in a very high-risk setting. Risk factors are statistical probabilities, not predetermined certainties, when applied to any individual case. The risk approach, like its public health ancestor, focuses mainly on prevention. Explanation is not its primary purpose, however, and many have criticized the risk approach as atheoretical (Moore 1995).

Those who advocate a risk-focused approach are informed by etiological research, although they are more directly concerned with identifying risk factors that are malleable through ethical and humane methods (see Hawkins and Catalano 1992). If one were

dedicated to reducing the spread of a contagious disease such as smallpox, for example, one would certainly be interested in the etiology of that disease. That knowledge would prove extremely useful in lowering risk, perhaps by

developing a vaccine to attack the specific viral agent involved. Indeed, part of the logic for a *useful* theory or a *useful* risk factor is whether interventions based on its logic will work (Moore 1995).

Risk factors, therefore, offer clues for explanation; they are empirical patterns to be explained. Any useful theory must be capable of *explaining* the statistical or conditional probabilities identified by research (see Braithwaite 1989). Both types of research are useful: Theory focuses more on etiology; risk approach focuses more on prevention.

Multilevel and interactional approaches to delinquency

Greater sophistication of information and computing systems has also begun to spur interest in testing *multilevel* (contextual) theories of delinquency (i.e., examining the relative explanatory power of individual, institutional, social structural, and cultural factors associated with delinquency). Despite abundant evidence that crime is related to time, place, culture, and social structure, delinquency research over the past century has heavily emphasized individual offenders' motivations. Calls for multilevel approaches and "integrated" theories have become more frequent in recent years.

The National Academy of Sciences panel on the Understanding and Causes of Violent Behavior, composed of an international panel of experts from a variety of disciplines, was established in 1989 to review existing knowledge and make recommendations to control violence (Reiss and Roth 1993). One of its main conclusions was that we have many promising directions for intervention and prevention to pursue from research findings, but better measures and more controlled research, especially evaluations of promising efforts, are needed to identify causes and opportunities for prevention. Using the risk approach to classify different predictors, panel members proposed a matrix consisting of two main dimensions: *temporal proximity* (closeness in time) of a predictor to the violent event, and the *level of analysis* at which that predictor is observed.

Levels of analysis refer to different units of observation and analysis, including macrosocial, microsocial, psychosocial, and biological (neurobehavioral). Macrosocial factors are characteristics (e.g., poverty, unemployment) of large social units such as communities, cities, States, and countries. Macrosocial predictors include both social structural and cultural variables. Microsocial factors are characteristics of encounters among people (e.g., family and group dynamics, situational factors such as availability of weapons, organizational and institutional processes). Psychosocial factors include individual characteristics (e.g., personality, learned rewards) or temporary states (e.g., influence of alcohol,

stress) that influence interactions with others. Biological or neurobehavioral factors, primarily in the brain, include chemical, electrical, and hormonal influences on behavior. Consistent with the risk approach, panel members suggested that prevention and intervention depend on breaking some link in the chain of events preceding the violent act. There are multiple options for intervening, and greater need for interagency collaboration: “[V]iolence problem-solving will require long-term collaboration and new organizational arrangements among local law enforcement, criminal justice, schools, and public health, emergency medicine, and social service agencies, all working with program evaluators and other researchers” (Reiss and Roth 1993, 10).

The multilevel approach carries important implications for the study of delinquency and youth gangs (Short 1998). First, juvenile delinquency is largely a group phenomenon, and the influence of gangs on individual members requires more detailed study of group processes and dynamics—not just individuals in groups—than has been the case. Second, there is a need for more precise definitions and classifications of “gangs” that separate gang membership from gang behavior. Such research would elaborate the processes and conditions under which groups form, become delinquent, and develop different norms of behavior, some delinquent and some nondelinquent. Third, the study of delinquency and youth gangs would benefit greatly from development of a viable typology that situates gangs or “youth networks” in a larger set of youth collectivities.

Such discussion inevitably leads to talk about theoretical integration. Some argue that efforts to support or falsify distinct theories should continue; others argue that different theories are not mutually exclusive at all and can be profitably integrated in some cases (e.g., Bernard and Snipes 1996). Theory, according to this latter view, should direct research and accumulate its product into a coherent, understandable product. Such is the aim of scientific progress. However, the failure to do so is witnessed by a million modest studies that produce a million conflicting results.

Although Bernard and Snipes give only passing attention to emerging statistical models such as hierarchical linear modeling, where independent variables can easily cross at least three levels of explanation (e.g., individual, institutional, and community),⁴ they agree in their conclusion that “multilevel explanations of individual criminal behavior, using a contextual approach, seem both desirable and feasible” (1996, 343). They conclude that more integrated theories are possible, and more complicated contextual theories that locate individual behavior within various groups, settings, social structures, and cultures are badly needed. The near future will likely witness an explosion of interest and growth in multilevel, contextual theories.

Juvenile Crime: Patterns and Changes Over Time

Based on measures of delinquency over time, we explore in this section major changes, or continuities, in delinquency seriousness (e.g., violent versus property crime), types (e.g., gang, drug, school, and firearm-related violence), and frequency (e.g., ratios of juvenile to adult offenders for different crimes, juvenile arrest and victimization rates for different crimes). Shifts in juvenile crime involvement will be explored, with an emphasis on the past 30 years.

Widely used official measures of delinquency include UCR collected by the Federal Bureau of Investigation (FBI) since 1930. Submission of data by police departments was initially voluntary, but 44 States enacted mandatory reporting legislation by 1997. Part I offenses, or "Index" offenses, include murder and nonnegligent homicide, forcible rape, aggravated assault, and robbery. Part II offenses include drug abuse violations, simple assaults, drunkenness, and disorderly conduct. UCR limitations have been reviewed extensively elsewhere (e.g., Biderman and Lynch 1991; Gove, Hughes, and Geerken 1985; Reiss and Roth 1993, appendix B).

Changes in delinquency types and seriousness

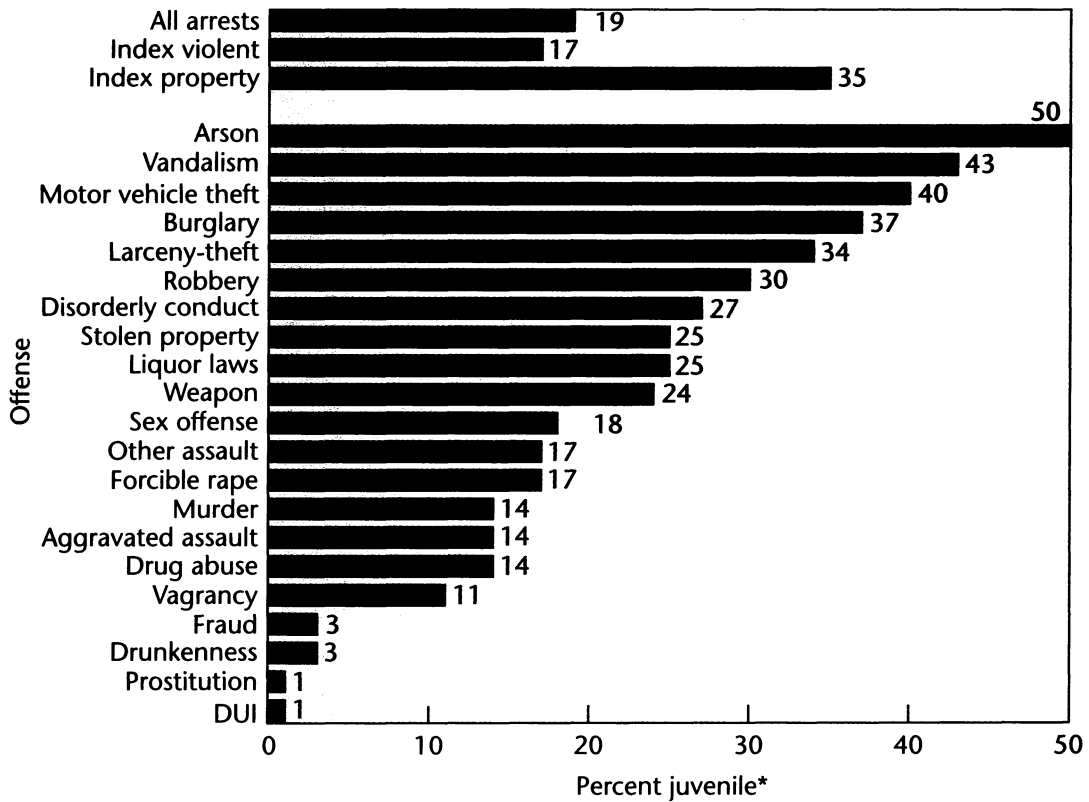
We begin by emphasizing two critical but often overlooked facts: (1) property crimes such as burglary or theft outnumber violent crimes by a ratio of at least 3 to 1, and (2) adult offenders outnumber juvenile offenders by a ratio of nearly 5 to 1 for Index violent crimes and nearly 2 to 1 for Index property crimes (Maguire and Pastore 1999). The percentage of crimes committed by juveniles relative to adults decreased between 1971 and 1997 for both property crimes (51 percent in 1971 versus 35 percent in 1997) and violent crimes (23 percent in 1971 versus 19 percent in 1997). We further examine delinquency shifts and evidence below.

According to the FBI, law enforcement agencies in the United States arrested 2.8 million juveniles in 1997 (Snyder 1998). Of all juvenile arrests, only 123,000, 4.4 percent, were for Index violent crime offenses (murder, forcible rape, robbery, or aggravated assault).

According to the FBI, law enforcement agencies in the United States arrested 2.8 million juveniles in 1997. Of all juvenile arrests, only 123,000, 4.4 percent, were for Index violent crime offenses (murder, forcible rape, robbery, or aggravated assault).

The vast majority of juvenile arrests are for property offenses, and for all offenses except arson, juveniles commit a much smaller proportion of offenses than adults (see exhibit 1). This is not to argue that juveniles never commit serious acts of violence, only that violent crimes committed by juveniles should be placed in a broader context. In 1997, juveniles accounted for 30 percent of robbery arrests, 17 percent of forcible rape arrests, 14 percent of aggravated assault arrests, and 14 percent of all murder arrests (Snyder 1998).

Exhibit 1. Juvenile proportion of arrests by offense, 1997



* Juveniles are defined as all persons under age 18.

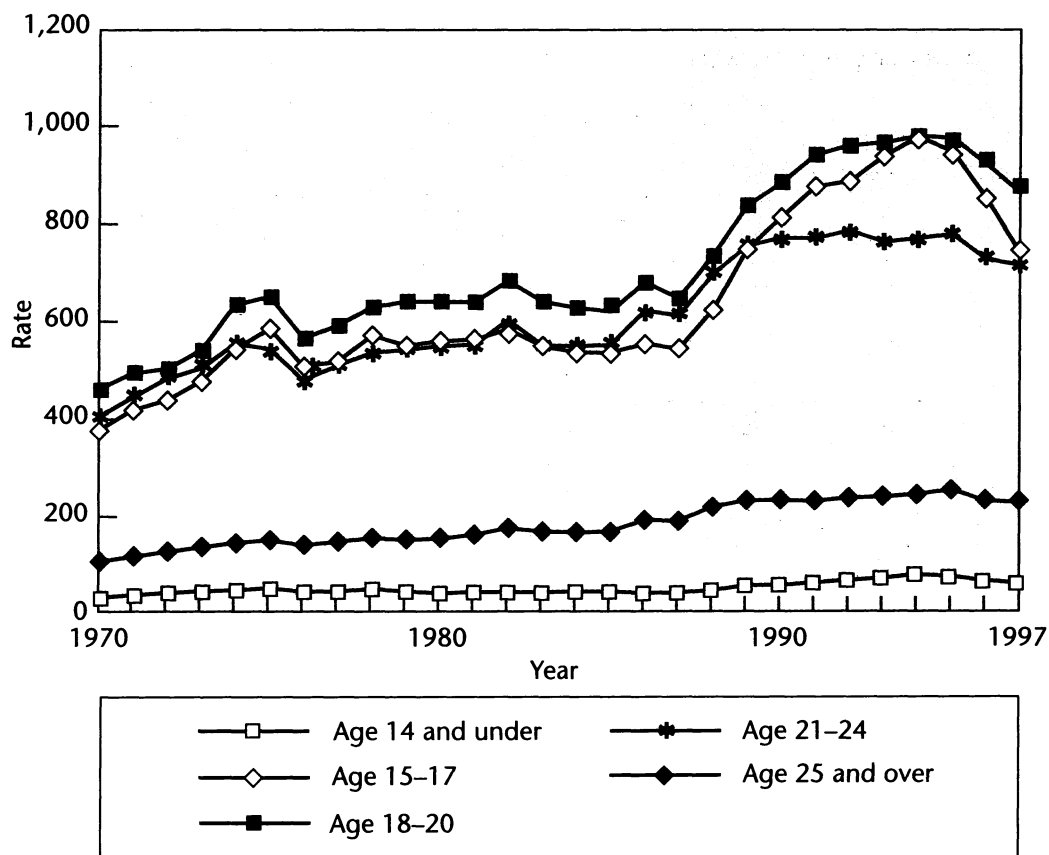
Note: The Violent Crime Index includes the offenses of murder and nonnegligent manslaughter, forcible rape, robbery, and aggravated assault. The Property Crime Index includes the offenses of burglary, larceny-theft, motor vehicle theft, and arson. Running away from home and curfew violations are not presented in this figure because, by definition, only juveniles can be arrested for these offenses.

Source: Snyder, Howard. *Juvenile proportion of arrests by offense, 1997*. Adapted from Snyder 1998. Retrieved 3 January 2000 from the World Wide Web: <http://ojjdp.ncjrs.org/ojstatbb/qa003.html>.

Data Source: U.S. Department of Justice, Federal Bureau of Investigation. 1998. *Crime in the United States 1997*. Uniform Crime Reports. Washington, D.C. Table 38.

In exhibit 2, we see changes in arrest rates for violent crime since 1970. Exhibit 2 shows sharp increases in violent offending rates for ages 15 to 24 between 1986 and 1994, with declines beginning in 1995. Using UCR arrest figures as a reference point, adults ages 18 to 20 have had the highest rates of involvement in violent crime over time, closely followed by juveniles in the 15 to 17 age group and adults in the 21 to 24 age group. These trends are based on arrest rates, however, which are calculated by dividing the number of offenses

Exhibit 2. Arrest rates for violent Index offenses per 100,000 population, by age group, 1970–97



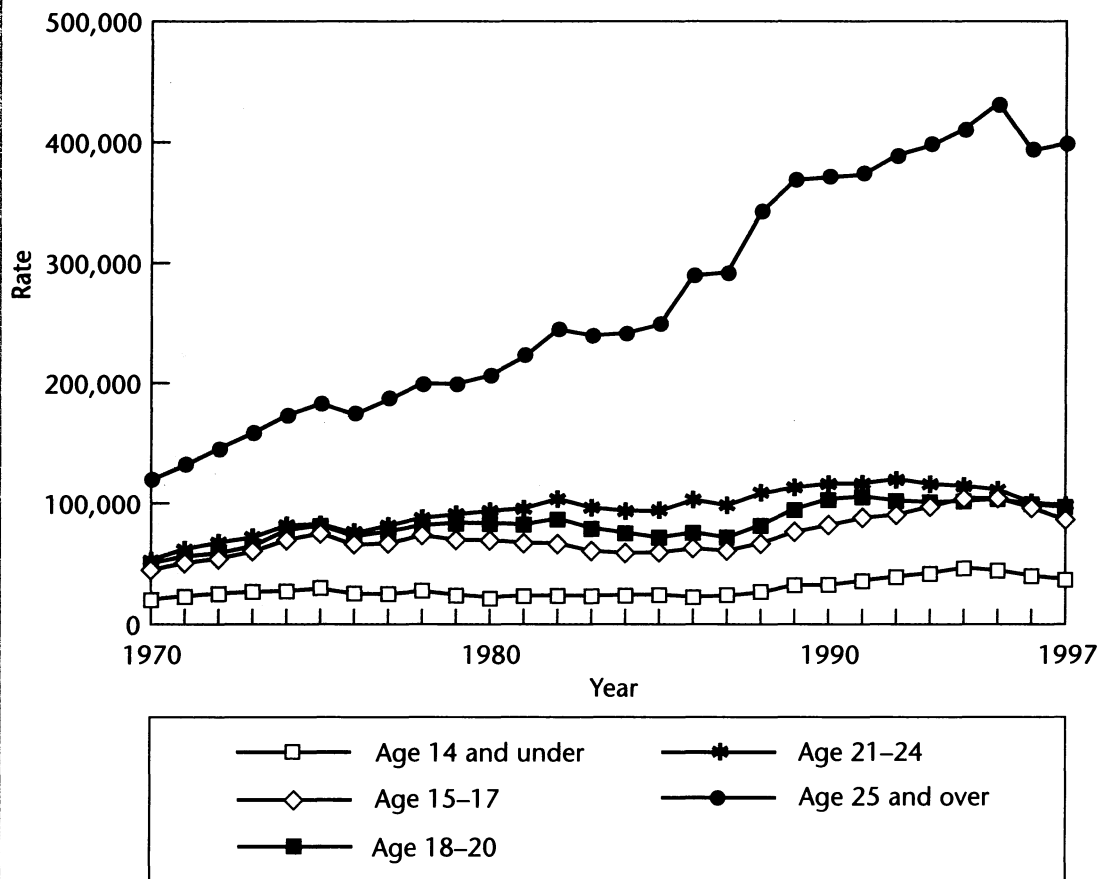
Note: The Violent Crime Index includes the offenses of murder and nonnegligent manslaughter, forcible rape, robbery, and aggravated assault.

Source: U.S. Department of Justice, Bureau of Justice Statistics. 1999. Arrests by age group, number, and rates for total offenses, Index offenses, violent offenses, and property offenses, 1970–97. Spreadsheet. *Crime and justice electronic data abstracts*. Retrieved 3 January 2000 from the World Wide Web: <http://www.ojp.usdoj.gov/bjs/dtdata.htm>.

committed by people in each age group by the total population in each age group. These rates give a good idea of how common violent offending is within each age group, but they do not necessarily indicate the total volume of offenders being processed by justice agencies. Both types of measures are important.

The total volume of violent crime committed by juveniles is relatively small. In exhibit 3, we see that arrests of violent offenders ages 25 and over far outnumber arrests for any other age group. The same age group displays the sharpest

Exhibit 3. Number of arrests for violent Index offenses, by age group, 1970–97



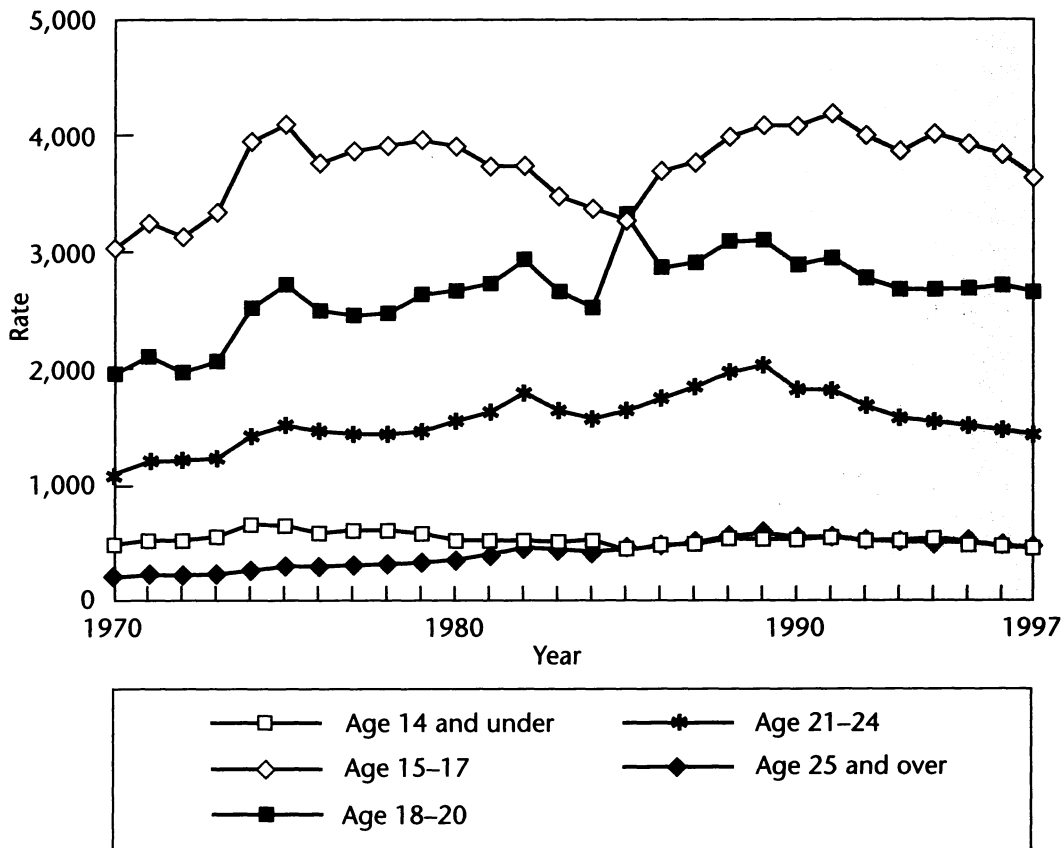
Note: The Violent Crime Index includes the offenses of murder and nonnegligent manslaughter, forcible rape, robbery, and aggravated assault.

Source: U.S. Department of Justice, Bureau of Justice Statistics. 1999. Arrests by age group, number, and rates for total offenses, Index offenses, violent offenses, and property offenses, 1970–97. Spreadsheet. *Crime and justice electronic data abstracts*. Retrieved 3 January 2000 from the World Wide Web: <http://www.ojp.usdoj.gov/bjs/dtdata.htm>.

increase in arrests for violent offending over time, although other age groups show much smaller increases between 1986 and 1994 before declining in 1995. Juveniles are arrested for violent offenses in much lower numbers than adults, with those ages 15 to 17 arrested in numbers comparable to, but still slightly lower than, those in the 18 to 20 and 21 to 24 age groups.

We find similar patterns for property crimes. Exhibit 4 shows arrest rates for Index property crimes. According to exhibit 4, juvenile offenders in the age group 15 to 17 commit property offenses at the highest rate of the five age groups examined. Again, however, we emphasize that such statistics are meaningful only

Exhibit 4. Arrest rates for property Index offenses, per 100,000 population, by age group, 1970–97



Note: The Property Crime Index includes the offenses of burglary, larceny-theft, motor vehicle theft, and arson.

Source: U.S. Department of Justice, Bureau of Justice Statistics. 1999. Arrests by age group, number, and rates for total offenses, index offenses, violent offenses, and property offenses, 1970–97. Spreadsheet. *Crime and justice electronic data abstracts*. Retrieved 3 January 2000 from the World Wide Web: <http://www.ojp.usdoj.gov/bjs/dtdata.htm>.

to the degree that they reveal which age group contains the highest proportion of property offenders. We need to probe further to see who commits the greatest numbers of property crimes.

As we see in exhibit 5, serious property crimes are committed disproportionately by those in the 25 and over age group. This particular age group shows the greatest increases over time, although Index property crimes overall are down since 1994. Those ages 15 to 17 commit a higher number of property crimes than those ages 18 to 20 and 21 to 24, however, and even juveniles ages 14 and under commit a slightly higher number of property crimes than those ages 21 to 24. Although juveniles are involved in much less crime overall than adults, property crimes are where they show up in the highest numbers. Overall, though, property crimes committed by juveniles changed little between 1970 and 1994, and have decreased since then.

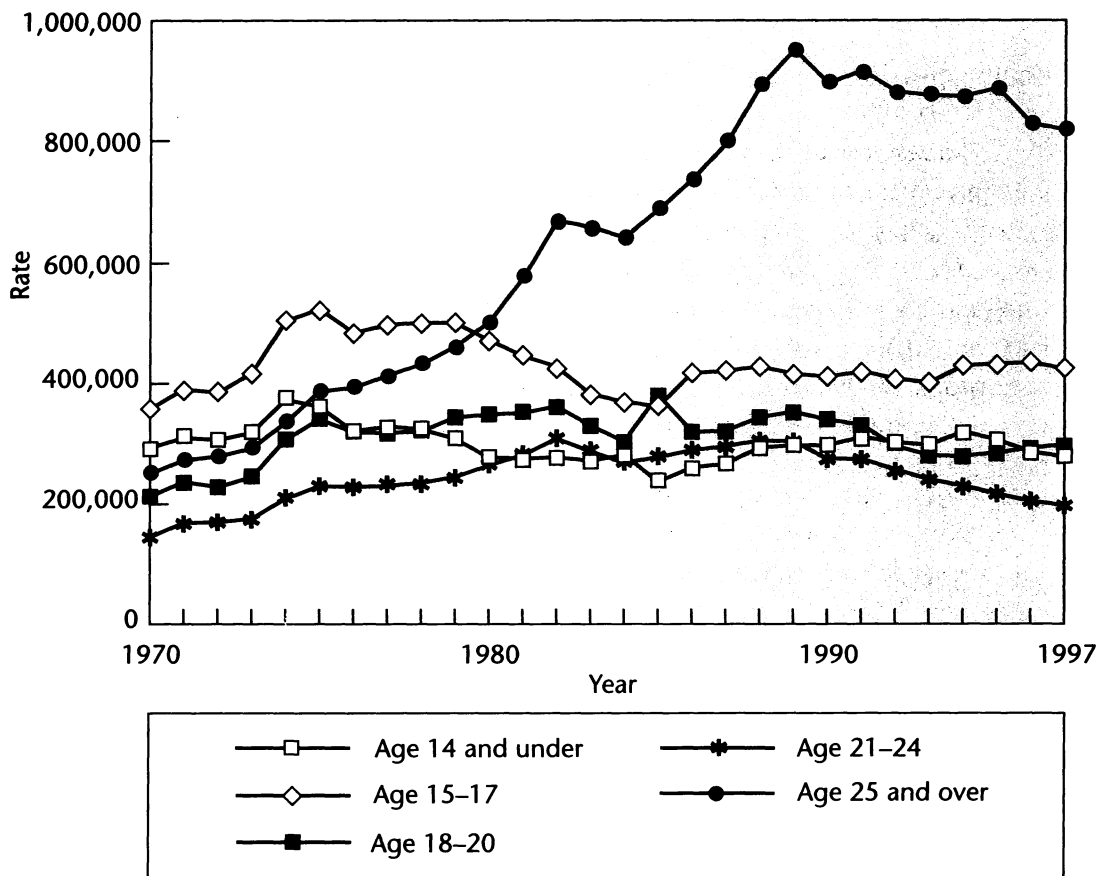
Some specific types of property crime have increased, however, while others have decreased. The total number of arrests for both burglary (-15 percent) and car theft (-17 percent) decreased substantially from 1988 to 1997, while arrests for larceny (+9 percent) and arson (+22 percent) were up somewhat for the same period (Snyder 1999). Since 1980, however, burglary is the only one of the four Index property offenses to decrease.

Other non-Index offenses (e.g., simple assaults, forgery, vandalism, drug abuse violations, liquor law violations, and disorderly conduct) accounted for a whopping 54.4 percent (1,545,400) of all juvenile arrests in 1997 (Snyder 1999). Juvenile offenders, as they always have been, are disproportionately involved in property crimes and in less serious (non-Index) crimes.

If we focus for a moment only on non-Index offenses where the number of offenses has increased by 20 percent or more from 1988 to 1997, we find large increases in arrests for simple assaults (84 percent), fraud (58 percent), vandalism (20 percent), weapons carrying or possession (44 percent), drug abuse violations (125 percent), gambling (166 percent), offenses against the family and children (150 percent), and disorderly conduct (86 percent). The only non-Index offenses that have decreased by 20 percent or more are prostitution and commercialized vice (-28 percent) and driving under the influence (-21 percent) (Snyder 1999).

So-called "status" offenses (suspicion, curfew and loitering, and runaways) made up the remaining 468,000 (16.5 percent) of the total number of juvenile arrests in 1997 (Snyder 1998), and curfew violations and runaways made up the majority (99.7 percent) of arrests in this category.

Exhibit 5. Number of arrests for property Index offenses, by age group, 1970–97



Note: The Property Crime Index includes the offenses of burglary, larceny-theft, motor vehicle theft, and arson.

Source: U.S. Department of Justice, Bureau of Justice Statistics. 1999. Arrests by age group, number, and rates for total offenses, Index offenses, violent offenses, and property offenses, 1970–97. Spreadsheet. *Crime and justice electronic data abstracts*. Retrieved 3 January 2000 from the World Wide Web: <http://www.ojp.usdoj.gov/bjs/dtdata.htm>.

Given the relatively low involvement of juveniles in both property and violent crime relative to their adult counterparts, how then do we explain the toughened policy response to juvenile offenders in the last two decades of the 20th century? We believe that very short-term shifts in violent crime, especially homicide, largely drove the get-tough policy on juvenile offenders since the 1980s.

After more than a decade of relative stability, juvenile violent crime arrests began to increase in the 1980s, peaking in 1994. In fact, in 1994, teens ages 15

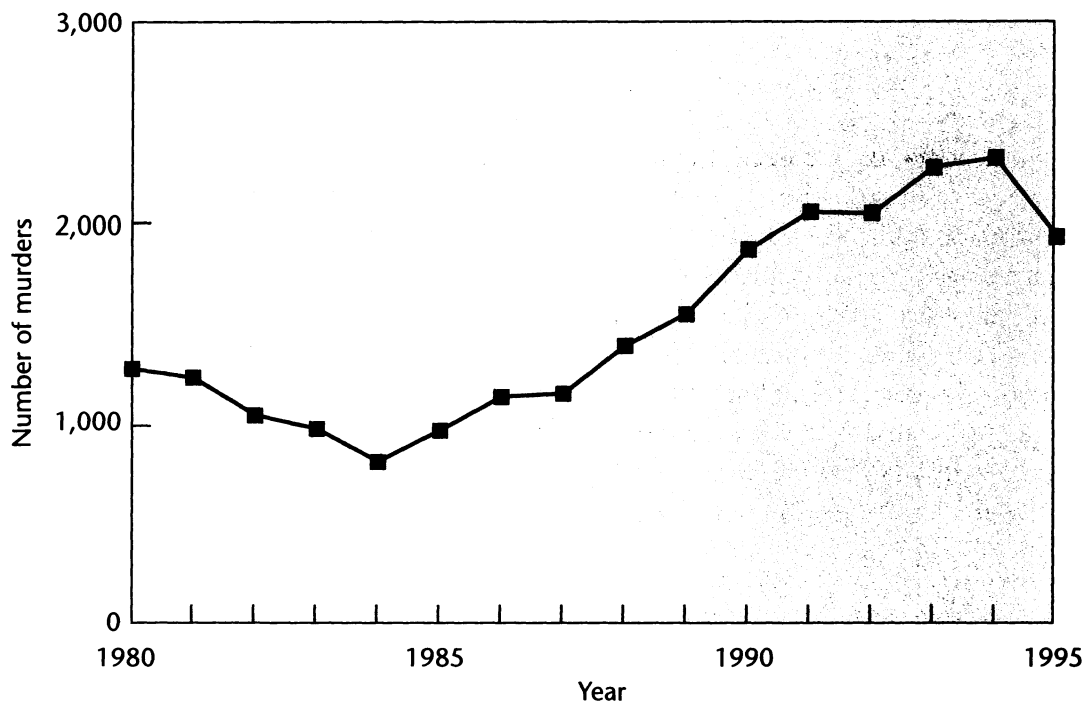
to 17 exceeded the *arrest rate* for Index violent crime offenses of adults ages 18 to 20. But things began to change in 1995 when juvenile arrests for Index violent crime offenses continued to decline for 3 years in a row (exhibits 2 and 3).

Exhibit 6 shows the number of murders known to involve juvenile offenders since 1980. Homicides involving juvenile offenders increased dramatically from 1988 to 1994, before declining in 1995. Note, however, that juveniles committed only a small proportion of all homicides, and this remains true over time. In 1980, juveniles were involved in 1,283 homicides, or 8 percent of the total. These numbers declined through 1984, when there were about 800 homicides, or 5 percent of all homicides, in which a juvenile offender was involved. After 1984, homicides by juveniles grew both in number and in proportion to the whole (Snyder 1998). Homicides by juveniles peaked in 1994 when juveniles were implicated in 2,317 homicides, 16 percent of the total, and then dropped substantially between 1994 and 1995. Juveniles committed only 1,545 (13.5 percent) of 11,475 known homicides in 1997, the most recent year available.

We do not argue that increases in juvenile violence between 1988 and 1994 are unimportant, only that some broader perspective is needed. In 1997, the juvenile arrest rate for murder was 20 percent above the 1988 rate, but 40 percent lower than in 1993. The juvenile arrest rate for forcible rape changed little from 1983 through 1997, while the 1997 rate was 23 percent below the peak year of 1991 (Snyder 1998). Juvenile robbery arrests declined 30 percent from 1980 through 1988, then increased 70 percent between 1988 and 1994. The juvenile robbery rate declined substantially for the next 3 years, nearly reaching its lowest level in 20 years (Snyder 1998). Juvenile arrests for aggravated assault showed huge increases from 1983 to 1994 (120 percent). Similar increases (+135 percent) were observed for simple assaults. However, the rate of juvenile arrests for aggravated assault fell 16 percent between 1994 and 1997, while the juvenile arrest rate for simple assault continued to increase (+9 percent). Needless to say, current levels of juvenile violence are still above 1970 or 1980 rates (see exhibits 2 and 3), and recent decreases leave little cause for celebration or complacency (Snyder 1998). However, what seems clear is that responses to juvenile crime have toughened much more than can be explained by increased juvenile involvement in crime. This is true even if we focus on an extremely small proportion of offenses (e.g., homicide or robbery), for offenders (e.g., ages 15 to 17), for a limited time period (1988–94).

If attention is drawn to serious, violent delinquency, rather than the more frequent property crimes and adult offenders, policymakers and the public are inevitably drawn to a juvenile underworld of guns, gangs, drugs, and violence. Although important, such phenomena are still relatively uncommon. To the

Exhibit 6. Number of murders known to involve juvenile offenders, 1980–95



Source: Snyder, Howard. Murders known to involve juvenile offenders, 1980–1995. *OJJDP Statistical Briefing Book*. Retrieved 3 January 2000 from the World Wide Web: <http://ojjdp.ncjrs.org/ojstatbb/qa051.html>

Data Source: Author's analysis of the Federal Bureau of Investigation's Supplementary Homicide Reports 1980–1995 [machine-readable data files], 1997.

degree that Federal funding agencies adopt these foci as priorities for legislation and funding, a potentially misleading research agenda is created. Social scientists aspire to influence policy, but policymakers also shape the types of research studies that get funded and completed (Hagan 1989). If we keep in mind that property crimes occur much more frequently than violent crimes, and that juveniles commit only a small proportion of all crimes, we will keep delinquency in a more accurate perspective.

Juvenile gangs and drug-related crime

Juvenile gangs have existed throughout the 20th century, with excellent accounts provided by Chicago School sociologists such as Thrasher (1927) and Whyte (1943). However, increases in gang membership, gang activity, and gang-related

violence since the 1980s have caused renewed concern. In particular, gangs have become more involved in drug activity (but by no means drug activity exclusively) and are more likely to possess, carry, or use firearms than in the past. Recent research studies consistently indicate that gang activity has extended beyond large urban areas into suburban and rural areas, and that gangs are increasingly diverse in terms of ethnic composition, organization, and involvement in delinquent or criminal activities (e.g., Curry, Ball, and Decker 1996; Klein 1995).

Changes in gangs have occurred with rapid changes in the social and economic structure of cities and suburbs (Fagan 1996). In particular, two factors have fundamentally changed the labor market for poor young men and women in urban areas since 1970: (1) replacement of unskilled and semiskilled blue-collar jobs with "pink-collar" jobs requiring higher educational and skill levels, and (2) growth of the informal economy, especially illegitimate drug markets. Changes in legitimate markets, therefore, shaped illegitimate opportunities, and social control in neighborhoods, already weakened by the flight of middle-class residents, was further weakened by volatile drug markets.

Deindustrialization has altered the nature of gangs, creating new relationships among gangs, illegal drug distribution, and the survival of young adult gang members in a postindustrial, segmented economy (Hagedorn 1991). Hagedorn described deteriorating neighborhoods with declining resources and fractured internal cohesion. Neighborhoods were characterized not by the absence of working people, but rather by the absence of effective social institutions.

Based on fieldwork in New York City's Spanish Harlem district, Bourgois (1997) argued that a culture of resistance and an underground economy emerged in opposition to demeaning, underpaid employment. Regular displays of violence became necessary for success in the underground economy. Employers looked for individuals who could demonstrate a capacity for effective violence and terror. Violence became a tool not just for drug dealers, but for others who wanted to maintain a sense of autonomy and dignity. Interacting cultural and structural influences, according to this perspective, are an ideological dynamic of ethnic discrimination that interacts explosively with an economic dynamic of class exploitation, a concept Bourgois terms "conjugated oppression."

However, many unanswered questions remain about these new types of gangs (Short 1998). For example, what criteria should be used to classify gangs into types? How do gangs relate to drug crews, milling crowds, delinquent networks, skinheads, bikers, and many other groups in which youths participate? How do gangs relate to friendship groups and processes that begin long before adolescence? A renewed and vigorous research agenda focused on juvenile gangs is needed in the 21st century.

School disorder and violence

Schools are primary settings for juvenile violence. Thirty-seven percent of all violent crimes experienced by youths ages 12 to 15 occurred on school grounds (Whitaker and Bastian 1991), while 56 percent of all juvenile victimizations (property and violent crimes) in 1991 occurred in school or on school property. Snyder and Sickmund (1995, 16) explain that "There is no comparable place where crimes against adults were so concentrated."

Increased research and policy attention will continue for some time to be devoted to measuring, explaining, and preventing school violence, largely in response to a few dramatic, bloody incidents such as the Littleton, Colorado, high school massacre on April 20, 1999, and the Jonesboro, Arkansas, schoolyard shootings on March 24, 1998. While public perceptions of any social problem are frequently driven by such rare incidents (Welsh and Harris 1999), there is still cause for concern.

A National School Board Association survey of 720 school districts throughout the United States found that 39 percent of urban school districts use metal detectors, 64 percent use locker searches, and 65 percent use security personnel in their schools (National School Board Association 1993). In the same survey, 82 percent of school districts reported that the problem of school violence is worse now than it was 5 years ago. Overall, 35 percent believed that school violence had increased significantly and that the incidents were more serious.

Results from the 1995 National Crime Victimization Survey, based on interviews conducted with a nationally representative sample of more than 10,000 youths, showed that 14.5 percent of students ages 12 to 19 experienced one or more violent or property crimes at school over a 6-month period (Chandler et al. 1998), with the percentage of youths reporting violent victimizations increasing from 3.4 percent in 1989 to 4.2 percent in 1995. The percentage of students reporting a street gang presence at their school nearly doubled to 28.4 percent between 1989 and 1995 (Chandler et al. 1998), and those who reported the presence of gangs at their school were twice as likely to fear attack (Bastian and Taylor 1991). Unfortunately, the risk of being either a victim or perpetrator of violent crime is much greater for children attending school in poor, urban, minority communities (Sheley, McGee, and Wright 1995).

Misbehavior of low-income, African-American children may partially represent reactions to oppressive life experiences and standards perceived as unfair and unobtainable (Cohen 1955), resulting in attempts to recapture feelings of self-worth, identity, and respect by adopting norms of social distancing and physical toughness (Anderson 1998; Hanna 1988). School and community factors play a role in school violence, however. Welsh, Stokes, and Greene (in press) found

that school climate (measured by student attendance and turnover) strongly mediated the effects of community variables (poverty, residential stability, and community crime rate) on school disorder (as measured by school incident and dismissal rates). Poverty retained a significant, indirect effect through its influence on school climate (see also Welsh, Greene, and Jenkins 1999; and Welsh [in press]). Further research is needed to accurately measure school violence; sort out the interactive influences of individual, school, and community-level variables on behavior; and inform the development of effective strategies for violence prevention.

Several other victimization surveys designed specifically for juveniles have been conducted in schools, although space limitations preclude discussion here (but see Anderson 1998; Gottfredson and Gottfredson 1985; Welsh, Greene, and Jenkins 1998; Welsh, Jenkins, and Greene 1997). Delinquency research and theory could benefit considerably by further examining juvenile behavior more closely in natural settings where children spend the most time (e.g., Bursik 1988; Messner and Rosenfeld 1997; Welsh, Greene, and Jenkins 1999).

Firearm-related crime

We cannot examine juvenile violence in the United States without examining the availability and use of guns. Reliable long-term statistics on juvenile gun use are scarce, but official statistics since 1980 provide a chilling picture (Snyder 1998). Juvenile arrests for weapon law violations doubled between 1987 and 1993. Gun homicides by juveniles in the United States tripled between 1983 and 1997, while homicides involving other weapons declined. From 1983 through 1995, the proportion of homicides in which a juvenile used a gun increased from 55 percent to 80 percent (Greenbaum 1997). In fact, the overall increase in juvenile homicide witnessed in the mid-1980s *was* entirely firearm related (Snyder, Sickmund, and Poe-Yamagata 1996). Correspondingly, recent decreases in juvenile homicides are entirely attributable to decreases in murders committed with firearms (Snyder 1998). Perhaps recent law enforcement programs and gun violence prevention programs aimed at juveniles are having some effect (Snyder 1998).

According to the Centers for Disease Control and Prevention (CDC) (U.S. Department of Health and Human Services 1995), 2.5 million teenagers in the United States carry weapons and frequently take them to school. Every day, CDC estimates, 135,000 students bring guns to school. In a 1995 survey of students from 10 inner-city high schools, nearly half of the male students said they could borrow a gun from friends or family if they wanted to, and 40 percent of students said they have a male relative who carries a gun (Sheley and Wright 1993).

In a survey of 758 male students in inner-city high schools and 835 male, serious offenders incarcerated in six detention facilities, Sheley and Wright (1993) found that 83 percent of inmates and 22 percent of students possessed guns. These firearms tended to be high-quality, powerful revolvers. Most detainees and students stated it was easy to acquire a gun; only 35 percent said it would be difficult. Fifty-three percent of students said they would "borrow" a gun from family members or friends if they needed one; 37 percent of students and 54 percent of detainees said they would get one off the street. Though involvement in drug sales was more common among those reporting gun carrying, the main reason given for carrying a gun was self-protection.

Projections of delinquency

Dramatic increases in high-risk juvenile populations and violent juvenile crime have been projected into the 21st century, prompting some to sound an alarm about the coming wave of teenage "superpredators." Prior to recent decreases in 1994, some researchers warned that if trends continued as they had for the past 10 years, juvenile arrests for violent crime would more than double by the year 2010 (Fox 1996; DiIulio 1996).

However, contrary to these predictions, juveniles contributed less than most other age groups to the increase in violent crime arrests between 1980 and 1997. The violent crime arrest rate for juveniles was 22 percent above the rate in 1980, but the rate increases for nearly all other age groups were greater (with the greatest increases, 66 percent and 60 percent, in the 35 to 39 and 30 to 34 age groups, respectively). The increase in juvenile arrests between 1980 and 1997 is not attributable to juvenile involvement in crime in any systematic way (Snyder 1998).

Some have raised concern that juvenile violence will increase in the next 10 to 15 years because the juvenile population is projected to increase at the rate of about 1 percent per year. Fox (1996), for example, noted that the rate of murder committed by adolescents ages 14 to 17 increased 172 percent from 1985 to 1994. The largest increases involved offenders who were friends and acquaintances of their victims. These increases in violent juvenile crime occurred while the population of teenagers was declining. Fox suggested that this demographic trend would soon change, because 39 million children were under age 10 and would soon enter their "high risk" years. Therefore, he concluded, the country would probably experience a future wave of youth violence that would be even worse than the 10 years prior to 1994.

Changes in the size of the juvenile population, however, appear largely unrelated to juvenile violent crime trends in recent years (Snyder 1998; see also

Blumstein et al. 1998). In fact, as we noted above, the rate of juvenile violent crime arrests decreased from 1994 to 1997 at the same time as the juvenile population increased. From 1987 to 1994, the juvenile population increased 7 percent, and juvenile arrests for violent crime increased 79 percent. From 1994 to 1997, juvenile arrests dropped 18 percent, but the juvenile population increased 4 percent. Violent juvenile crime has now declined 3 years in a row (1994–97).

How do we then explain these very recent but compelling decreases in juvenile violence? Blumstein et al. (1998) note that recent (1997) homicide rates remain high, but decreases have been recorded since 1991, when a peak rate of 9.8 per 100,000 was recorded. These authors ask how much this trend is related to age groups, weapons, and city size? Where are the decreases largest, and why? They conclude that changes in the use of weapons are most important in understanding recent peaks and valleys in homicide, particularly juvenile homicide. The growth in homicides by young people from 1985 to 1993 was entirely due to homicides committed with handguns. Recent decreases are similarly due to decreases in handgun-related homicides. These trends are most pronounced for large cities and may be related to the rise and fall of large crack markets and violent drug-related competition in large cities.

It is also possible that recent decreases in violent juvenile crime may be partially due to economic upturn (reduced unemployment rates), police crackdowns on illegal markets, increased incarceration rates (though incapacitation is more of an explanation for decreases in crime committed by older adults), increased youth involvement in legitimate labor markets, and less involvement in illegitimate opportunities. However, it is extremely difficult to parcel out the specific causes of the decrease (e.g., changes in demography, related social behaviors such as drug selling, expansion of police resources). Probably all played some role in interaction with one another. Blumstein et al. (1998) argue that those who would credit police strategies for large declines in crime in New York City have little evidence for their claims. Why was there a steady decline in nongun homicides, they asked, long before Mayor Rudolph Giuliani and former Police Commissioner William Bratton took office and began their multifaceted war on crime?

Curtis (1998) suggests that many people had written off inner cities at the peak of the crack problem in the late 1980s and early 1990s. How do we then explain the sudden decline in violent crime in such places? Curtis refers to ethnographic research in two New York City neighborhoods to look for answers. He suggests that many youths began to withdraw from public life as violence around them increased. He further suggests that two large gangs expanded their control over neighborhoods, but actively campaigned against

drug distribution, and instead encouraged youths to build positive lives. Curtis seems to suggest that community activism against violence also played a role, even though economic vitality can hardly be said to have increased markedly. At the same time, long prison sentences and aggressive policing against drug gangs helped reduce the influence of corporate-style drug gangs: many downsized, many disbanded. Remaining distributors became much more discreet and moved indoors, and turf battles were eliminated.

LaFree (1998) notes that violent crime rates increased dramatically from 1963 to 1974. In contrast, recent drops in violent crime are the greatest decreases since World War II. Social institutions provide a promising explanation for recent decreases (e.g., mutually shared and reinforced patterns of norms, rules, and laws). Institutions are capable of changing dramatically over time, and can thus explain huge, rapid decreases in crime. In the peaceful post-World War II years, social institutions (political, economic, and family) were strong. In the 1970s, public trust in political institutions plummeted; economic inequality, inflation, and decline of labor unions all reduced confidence in economic institutions. The traditional family of the 1950s was severely weakened in the 1970s (e.g., both parents working, more single parents, higher divorce rates). American society fought back against institutional decline by investing heavily in other institutions, especially criminal justice, education, and welfare. All three put downward pressure on crime rates, LaFree suggests.

Advocates of the superpredator thesis continue to warn that the country's largest and most violent cohort of young males will soon reach its crime-prone years (DiIulio 1997). In fact, DiIulio argues that the only reason crime has dropped rather than risen since 1994 is because smarter law enforcement (e.g., computer-assisted information systems) and tougher sentencing policies (e.g., policies that keep violent and repeat criminals behind bars) have been successful. Previous research has not confirmed these arguments, but DiIulio argues that there has never been a rigorous, clear-cut test of the association between the visible presence of police and crime rates.

The superpredator thesis so far seems suspect. Projections of crime trends based on straight-line projections of short-term trends (i.e., 1986–94) and single predictors (size of the at-risk youth population) tend not to be very reliable (Moore and Tonry 1998; Zimring and Hawkins 1998). Cook and Laub (1998) demonstrate that little relationship exists between the homicide count for youths ages 13 to 17 and their population count since 1968. They note that our ability to predict youth violence is limited by incomplete understanding of its various determinants, and the recent volatility in youth violence since the mid-1980s demonstrates that “making confident predictions is a fool’s game” (Cook and Laub 1998, 58).

The Changing Social, Economic, and Cultural Context

An understanding of the forces shaping juvenile justice policy requires an examination of the larger context in which delinquency, juvenile justice policy, and the evolving juvenile justice system are embedded. The juvenile court was created during a time when several contextual forces were interacting: urban areas had been growing rapidly, numbers of first-generation immigrants were especially great, biologically based theories were shaping the thinking of those in power, and the roles played by women outside of the home were changing. The origins of the juvenile court have been attributed to a desire to save children from undesirable life circumstances (Platt 1977), a desire to exercise greater control over lower class ruffians, and a perceived need on the part of prosecutors and the police to correct a situation in which young offenders were being acquitted by sympathetic juries (Mennel 1973).

Structural shifts in the juvenile justice system that occurred during the Juvenile Rights Period (1961–80) are also best understood if viewed in terms of the social and cultural context of that time. Civil unrest and significant court activity in the area of civil rights lay the groundwork for examining and specifying the rights of juveniles. *In re Gault* and other due process cases of this era gave rise to a more adversarial court that has had both positive benefits and unanticipated negative consequences for juvenile justice.

At the beginning of the 21st century, the juvenile justice system has reached a major crossroad with respect to its mission, and the future of the juvenile court is in question. But to discuss juvenile justice without considering the larger economic, social, and cultural context would be foolish. We can only skim the surface of current trends, but even a cursory glance at the present and the immediate future suggests that there are important issues that must be included when considering the kind of juvenile justice system the United States needs.

The juvenile justice system was founded during a time of social disorder that has been linked to the Industrial Revolution, when new industries were forming, agricultural societies were being converted into urban industrial societies, urban areas were rapidly growing in size, and immigration was introducing new languages and cultures into already disorganized environments (Empey 1978). This period of social disruption and that of the 1960s dramatically affected both the nature of the adolescent experience and America's construction of juvenile justice. In the first instance, new systems of social control were formed to manage relationships between children and adolescents and the larger community. Child labor laws, mandatory education, and the juvenile court reduced the options of young people in keeping with the needs and values

of those groups that were shaping the future of this new nation. The 1960s brought about a redefinition of the power of children and adolescents with regard to systems of authority. Young people were granted new rights and a greater role in shaping their own futures, creating uncertainty and tension about the proper role of adult authority.

During 1998, the population of the United States grew by more than 2.3 million, and in the year 2000, it was 12 million larger than in 1995, when the total population was estimated to have stood at 263 million (Day 1996a). By 2010, another 25 million Americans will be added, and by 2050, the U.S. population is projected to be 50 percent larger than in 1995. Surprisingly, these changes are occurring in the midst of a slowdown in U.S. population growth.

The U.S. population is also aging. That is, growth is greatest among persons in their 50s, whose numbers are expected to double between 1996 and 2006, and the group 85 and older, which will double in size by 2025 (Day 1996a). By the year 2030, the 65-and-over segment of the population will grow to 20 percent of the population, up from its current level of 13 percent. The 15-to-20 age group, which began growing in 1991 after a lull, will peak in 2010, as will the 45-to-50 age group (Day 1996a). Adolescents ages 15 to 20 will reach 21.7 million in 2010, up from 17.7 million in 1990. Coincidentally, as this adolescent bulge hits its peak, the children of the previous baby boom will begin retiring. In the long run, even though the numbers of children under 18 will continue to grow, young people will not comprise a greater portion of the population than they have in the recent past (Day 1996a; Poe-Yamagata 1998).

Racial and ethnic diversity will continue to challenge our society. Of the more than 2.3-million increase in the population from 1997 to 1998, 900,000 were Hispanic and 459,000 were African-American (Day 1996a). The non-Hispanic white population is projected to drop proportionately from its current level of 72 percent to only 53 percent by 2050, and the number of African-Americans will double by 2050, but the segment of the population that will grow most rapidly is the Hispanic-origin population. Hispanics will add the largest number of persons to the U.S. population every year for the next half century and are likely to be the second largest race/ethnic group by 2010.

For young people these changes are especially significant when we consider the combined age and racial/ethnic changes taking place. While the population of the United States is aging, non-Hispanic whites will comprise a much larger proportion of the over-65 age group than the under-18 age group (Day 1996a). Due to differences in fertility rates and high levels of Hispanic immigration, by 2030, non-Hispanic whites will comprise less than half of the under-18 age group but three-fourths of senior citizens. In 1996, the median age among

At the close of the 20th century, the juvenile system appears to be having increasing difficulty dealing with its inherently contradictory missions of adolescent control and adolescent welfare. The antithetical dimensions are captured in the dilemma that "the child is a criminal and the criminal is a child."

white non-Hispanics was 36.9 in contrast to the median age for Hispanics (26.4) and black non-Hispanics (29.5). By the year 2010, the median age for whites is projected to be 41.0, while for Hispanics the median age will grow to only 27.7 and for black non-Hispanics will reach 30.9. Given America's history of race relations and the impact of resource concerns on racial conflict (Beck and Tolnay 1995; Kennedy 1997), the interaction of age and race/ethnicity promises to be a volatile part of the political equation of the 21st century.

Median incomes in the United States have been rising sharply since 1991 (U.S. Bureau of the Census 1998). Except for significant dips in the 1970s and early 1990s, the overall economic picture is positive. The median income of U.S. workers has grown 58.3 percent since 1947, and real per capita income has grown by 78.6 percent since 1967. This growth is not evenly distributed, however. The incomes of African-Americans and Hispanics are far below those of whites, Asians, and Pacific Islanders. Since 1975, all racial and ethnic groups, except for Hispanics, have experienced income increases. Incomes of

Hispanics have remained unchanged and since 1993 have fallen below those of African-Americans.

With respect to Hispanics, the most rapidly growing racial and ethnic segment in our society, income disparity is increasing (U.S. Bureau of the Census 1998). In 1997, the per capita income of Hispanics was half that of whites. Income for blacks is increasing but at a rate slower than that for whites, and African-American per capita income is barely larger than that for Hispanics. With income disparity increasing during a time of prosperity, economic pressures on urban racial and ethnic minorities will undoubtedly grow.

While the number of youths living in poverty has increased over the past two decades (U.S. Bureau of the Census 1999b), this picture varies across racial and ethnic groups. Overall, the increase in the number of youths living in poverty over the past 2 years has been 42 percent, but for Hispanic youths this increase has been 116 percent. For white families with children under 18, the percent living in poverty is increasing (U.S. Bureau of the Census 1999b). In 1977, the percentage in poverty figure for white families was 9.6; it had increased to 13.0 percent by 1997. For black families with children, there has

been some fluctuation in percentage in poverty, from 34.2 percent in 1977 to 36.6 percent in 1987 and down to 30.5 percent in 1997, but the figures are consistently large. Among families of Hispanic origin, the recent figures are similar to those of blacks: 25.3 percent in 1977, 31.9 percent in 1987, and 30.4 percent in 1997. Given these economic trends, the proportion of families in each racial group that live in poverty is not likely to decline.

A terminal condition?

At the close of the 20th century, the juvenile system appears to be having increasing difficulty dealing with its inherently contradictory missions of adolescent control and adolescent welfare. The antithetical dimensions are captured in the dilemma that “the child is a criminal and the criminal is a child” (Feld 1993a). The system’s reputation for inconsistency and arbitrariness continues to plague it. A participant observer of the Nation’s largest juvenile justice system, Los Angeles, has captured the essential realities of the system today: “That is the heartbreak of the Juvenile Court, the wonder of it, and the scandal. Heartbreak, because every kid cannot be saved. Wonder, that this broken, battered, outgunned system saves even one child. Scandal, because it so seldom tries to do anything at all” (Humes 1996, 371).

Any of three general scenarios seem possible for the future of the juvenile system: (1) abolition, with functions merged into the adult criminal system; (2) adaptation, largely by continuing to jettison to the criminal system those youths who are popularly considered unsalvageable while developing new modalities for dealing with those deemed reformable; or (3) expansion, with the court’s traditional welfare rationale embracing at least some varieties of adult criminality.

Calls for abolition of the juvenile court comport with contemporary public sentiment that focuses on the depravity of youths who commit crimes, particularly violent crimes. For example, Feld, Rosenberg, and Bazemore (1993) argue that the court’s founding rationale regarding the provision of social services in a judicial setting is inherently inconsistent. Judicial mechanisms focus fundamentally on punishment and (what may be the same thing) coercive rehabilitation. They do not address larger social issues (e.g., family, housing, education, and health) that are the crux of the needs of youths who find themselves captured by the juvenile system. The adult criminal court purportedly would do as much to benefit adolescents who commit crimes as the juvenile court does. To compensate for diminished responsibility of youths vis-a-vis adults, a “youth discount” might be applied in sentencing (Feld, Rosenberg, and Bazemore 1993).

Critics of this approach (e.g., Rosenberg 1993) note that the procedural guarantees of adult criminal courts are elusive for most adult criminal defendants. If

plea bargaining becomes anywhere near as ubiquitous for youthful defendants as it is for adult defendants, then deficiencies in procedural due process are merely spread over a larger population of criminal court defendants.

Especially since the mid-20th century, the juvenile court has exhibited a remarkable ability to endure through adaptation; it has been termed “an institutional chameleon” (Schwartz, Weiner, and Enosh 1998, 548):

[T]he juvenile court has been almost uniquely positioned among justice system agencies to be able to intone, without blanching, whatever bromide suits the moment. It has been able to do so because its mission and mandate have been so broad as to be indefinite, thereby permitting an almost limitless set of messages to be crafted that reasonably fall within its purview.

In juxtaposition to the original intent of the formulators of the juvenile system as one into which youths should be diverted, the recent focus has been on diverting youths out of established, formal systems. It has been noted that “the contemporary juvenile court has become just another agency within a complex system of juvenile justice” (Singer 1998, 510). The most prevalent, though risky, technique of adaptation has been the court’s tendency to slough off controversial classes of cases. At the lower end, “status offense” jurisdiction has been channeled to less formal mechanisms as the court has focused on more serious matters. More significantly, at the other end of the spectrum, since the late 1960s, the court has relinquished power over increasing numbers of cases to the adult criminal courts. Though ostensibly such transfers are grounded in a youth’s maturity and personal moral culpability, they tend frequently to represent frustration with youths who are not transformed into law-abiding citizens through the strained resources of the juvenile system (Federle 1996).

Prosecuting youths in adult criminal courts normally entails the legal process known as the “waiver.” In a move that betrays the hollowness of its theoretical philosophical foundations (*viz.*, *parens patriae*), the juvenile court officially washes its hands of youths, delivering them over to punishment by the “adult” system. More recently, the trend has been for legislatures to simplify this task by codifying certain crimes as completely outside the jurisdiction of the juvenile court or to vest with the prosecution the awesome discretion of deciding whether a case should be brought into adult or juvenile court. Issues of so-called reverse waiver arise when youths seek to have their cases returned to juvenile court.

The popularity of defining youths as adult criminals is evidenced by the array of mechanisms that exist to get or keep youths in criminal court. A recent analysis

of State transfer provisions noted that discretionary waiver exists in 46 States, statutory exclusion in 28 States, "once an adult, always an adult" clauses in 31 States, direct file by the prosecution in 15 States, "rebuttable presumption" waiver in 15 States, and mandatory waiver in 14 States (Griffin, Torbet, and Szymanski 1998). Reverse waiver provisions exist in 23 States.

A substantial body of research has accumulated on waiver processes. Generally, studies fail to find a coherent legal rationale underlying waiver processes in any particular court. For example, for youths who have not previously been "waived" to criminal court, severity of the present crime did not distinguish those who are waived from those who remain in juvenile court (Lee 1994). In a State where waiver was a prosecutorial decision, most youths who were waived were charged with felonies, but only a small fraction were charged with violent felonies against the person, and nearly one-quarter had no prior criminal record (Bishop, Frazier, and Henretta 1989). Indeed, youths transferred are frequently incorrigible property offenders (Poulos and Orchowsky 1994). Additionally, both race/ethnicity and gender have been associated statistically with prosecutorial requests for transfer (Dawson 1992).

Ironically, unless the crime at issue is a patently serious one, youthful offenses may be taken less seriously by adult courts than by juvenile courts. For youths involved in crimes against the person, punishment is generally dispensed more liberally in adult than in juvenile court, but youths involved in property crimes (including those with an extensive history of such crimes) appear to receive harsher sanctions in juvenile court than in adult court, where the crimes normally handled make the juvenile offenses pale in comparison (Barnes and Franz 1989). Also, one recent study that followed transferred and nontransferred youths for a 2-year period found that a larger proportion of the former committed new offenses, leading the authors to conclude that "[i]f legislatures and courts intend to deter youths from committing additional offenses by subjecting those who persist in delinquency to the more severe punishment of the adult criminal justice system, our data indicate that they are not achieving that goal" (Podkopacz and Feld 1996). Another study used matched cases tracked for a period of 7 years and concluded that transfer was associated with higher frequency of re-arrest, controlling for type of offense (Winner et al. 1997). Also, this same study found that, irrespective of the original offense, transferred youths who were rearrested were apprehended more often and more quickly than were nontransferred youths who were rearrested.

One significant component of system adaptation in the 1990s has been the trend toward restorative responses to adolescent criminality. These models hearken to the early days of the juvenile court in their informality. They are

dependent on a sense of community among those affected by the youth's actions, and they seek through mediation and dialogue to repair, insofar as possible, the harm done and to integrate the youth into the local society (Bazemore and Umbreit 1995). Unfortunately, such endeavors have tended somewhat to devolve into simplistic schemes that are adopted superficially by juvenile justice organizations, but that involve no meaningful change within entrenched organizational cultures fossilized in older, incompatible models (Bazemore 1992). Additionally, some purportedly "restorative" models are inherently contradictory in that their latent bases are essentially heavily punitive. For example, the popular, so-called balanced approach purports to balance three objectives: accountability, community protection, and competency development. However, the first two objectives are largely punitive, and only the last is focused on the youth's well-being.

It has been proposed that the historical, individualized, rehabilitative underpinnings of the juvenile court may profitably be used in a variety of adult criminal cases. Though this scenario defies the conventional wisdom of the current era, it does merit consideration. Among its rationales are the following: there appears to be no appreciable difference in severity between adult crimes and juvenile crimes; an adult's criminal behavior is most apt to decline over time, whereas a juvenile's is likely on the ascent until adulthood; limitations on the stigmatic aspects of the criminal process are apt to benefit adults as much as they benefit children; and youths are not necessarily more malleable than adults with regard to treatment (Hirschi and Gottfredson 1993). It has been suggested that a unified system would obviate the fictional, binary opposition that is presupposed by the current dual system, enabling the courts to recognize the gradations in autonomy/dependency and competency/incompetency that exist in the real world for both children and adults: "[f]reed of the requirement that an all-or-nothing determination be made, judges could recognize fine gradations in dependency, malleability, and responsibility as mitigating factors in sentencing" (Ainsworth 1995).

Conclusions

Our view of adolescence has changed from the one that inspired the creators of the juvenile court. Current emphases on accountability and offense-based policies indicate that in today's culture, adolescence is a subset of adulthood rather than childhood. There is a certain instability in this view, however. Ambivalence regarding adolescent autonomy can be seen in the many inconsistencies found in youth policy and case law. And the imagery of delinquency reflects the schizoid nature of juvenile justice: Are delinquents superpredators or naive risk takers? Is it more useful to think of delinquents as risks to public

safety or as developing preadults? Should juvenile justice decisionmakers focus on offense behavior or on the developmental needs of their young charges? Should juvenile court legislation emphasize personal accountability for offense behavior or rehabilitation?

America has seen a drop in the rates of every category of serious crime during the 1990s that had been preceded by dramatic increases. LaFree (1998) argues that these changes are causally related to the strength of social institutions that act to manage socialization, provide informal and formal social controls, and protect institutional members. Moore and Tonry (1998), examining trends in youth violence, attribute increases in juvenile violence and victimization between 1985 and 1995 to an increase in size of the juvenile population interacting with two parallel trends: increased poverty among families in urban areas and a developing culture of violence. The picture of economic decline and structural disintegration of urban areas and families during the 1970s and 1980s are hypothesized as the context within which gangs, crack cocaine, and guns interacted to produce high levels of conflict that were more lethal than ever before.

The marginalization of minority communities has been fueled by reduced Federal funding to inner cities, urban decay, economic stagnation, and lack of meaningful education and job opportunities (Wilson 1987). Many have expressed concern about the "vicious cycle" perpetuated in inner-city neighborhoods by these and other factors. Examination of social indicators reveals a downward spiral in the quality of life for low-income and minority children. Social segregation and isolation may concentrate the negative influence of environmental factors on inner-city minority communities, resulting in withdrawal and apathy for some and explosive anger for others (Bernard 1990).

Although crime and responses to crime may be related, other forces shape both, and our ability to prepare for juvenile justice in the new millennium will depend on the scenarios we develop from our understanding of these relationships, the preferred futures we envision, and our capacity to adapt to the unexpected. From our current vantage point, we see a population of U.S. citizens that is growing, that is aging, that is becoming more diverse, and that is prospering economically. In spite of cautions regarding the growing number of adolescents in the next decade, proportionately, there is no upward trend for this age group. Instead, it is the senior citizen segment of our population that is growing.

The U.S. population is becoming more diverse. Non-Hispanic whites will make up a smaller proportion of the population, while the greatest increase will be among Hispanics. The Hispanic population will soon likely replace blacks as

Perhaps the greatest danger of juvenile justice as we enter a new century has been its clear propensity to further marginalize particular sociodemographic groups.

the group for which juvenile justice system resources are most concentrated. Hispanics will soon dominate the population of persons under 18, at the same time that their real income levels are dropping and they are, as a group, least involved in our system of education. The patterns of social marginalization and poverty already present within this population appear to be worsening. We are concerned, too, that as demands for government resources increase among the growing senior segment of the population, a group that is dominated by whites and the well educated, the ethnically diverse youth population will lose ground.

In spite of the apparent prosperity currently enjoyed by a large proportion of the U.S. population, poverty, immigration, and racial and ethnic diversity will continue to produce significant social problems. Given this context, the juvenile justice system must attend to the need for community involvement and support of involved parents, openly acknowledge issues of race and ethnicity, and find ways to engage youths in education, particularly those who are members of minority groups.

Facilitating strategic thinking in these areas are advances in delinquency and research. Theory development has benefited greatly from the positivistic approach. In particular, the influence of the Chicago School sociologists was pervasive. At the same time, increased interest in how effective laws, institutions, and justice policies can influence behavior and reduce delinquency is likely to continue. Although delinquency studies in the 20th century have been heavily quantitative, the ethnographic approach has also continued, as evidenced by excellent recent accounts of youth street culture (Anderson 1998), the role of guns in youth violence (Fagan and Wilkinson 1998), juvenile gang membership and structure (Hagedorn 1988; Miller 1998), and juvenile involvement in illegal drug use and sales (Williams 1989). We will continue to see increased interest in interdisciplinary, multilevel, and contextual approaches, as well as more attention to changes in behavior over the life course.

It is interesting to note how significant decreases in juvenile violence in the late 1990s continue to be accompanied by ever-increasing demands to get tough on juvenile crime. Property crimes by juveniles greatly outnumber violent crimes. Juvenile arrests for status offenses have increased dramatically, suggesting an across-the-board, get-tough policy unrelated to actual criminal behavior. We will continue to witness great concern with the problem of school violence, even though very few incidents cause the kind of injury or

death that is apparently driving the concern. The changing structure and differentiation of gangs will remain a lead topic, especially as those gangs become more embedded in economic, entrepreneurial contexts. The role of firearms in relation to juvenile violence will probably draw great policy attention in coming years. The superpredator hypothesis has thus far received little support, and more sound projections may hopefully inform public policy as our knowledge and methods improve in the future.

The myth of the violent superpredator is belied even by official statistics. To recapitulate some of the salient points made above, about 4 percent of juvenile arrests are for violent crimes. The vast majority of crimes (especially violent crimes) are committed by adults. Over the past 25 years, a decreasing proportion of both property crime and (more markedly) violent crime has been committed by juveniles. Though juvenile arrests for violent crimes increased in the 1980s and early 1990s, those rates have declined since 1994 even though the juvenile population has increased. Likewise, homicides by juveniles increased significantly from 1988 to 1994, but they have declined since then. At all times, homicides by juveniles have remained a small proportion of all homicides, reaching a high-water mark of only 16 percent of all homicides in 1994. Juvenile involvement in crime remains primarily in those areas in which it has existed throughout the century: property and nonserious crime.

The hypocrisy of the system is that it fails to confront the basic values that underlie the issue of responsibility, particularly social responsibility. Treatment and punishment are often commingled, so that injustice is apt to be the principal perception of those caught up in systems of what we so carelessly term juvenile "justice." Ayers' (1997, 41) insightful comments on the juvenile court are applicable to the entire juvenile system:

Young people in Juvenile Court are simultaneously pure *and* rotten, immaculate *and* corrupt, angels *and* brutes. We must love and understand the little unformed souls, even as we beat the devil out of the wicked, wayward youth. These seemingly contradictory ideas are united by a single, severe assumption: *We*—the respectable, the prosperous, the superior, and (especially in modern times) the professional—know what is best for *Them*—the masses, the poor, the outcast, the wretched of the earth—in short, our clients. We know what is best for them at all times and in all circumstances and without a doubt . . . [The objects of our interest] are rendered voiceless and faceless. (emphasis in original)

Perhaps the greatest danger of juvenile justice as we enter a new century has been its clear propensity to further marginalize particular sociodemographic groups. The children of the immigrant rabble of the early 20th century were

replaced in the latter part of the century by children of color. As was true of the unpopular, urban, European immigrants at the beginning of the century, high proportions of families who are racial and ethnic minorities live in poverty. We have noted that population projections for the 21st century predict great increases in the proportions of Hispanic citizens. The gross economic disadvantage that exists for minority families—especially Hispanic and African-American—needs to be seen in the new century as a preeminently important challenge for juvenile justice, not as a cultural blight that produces deviants rather than prosocial human beings.

The dawn of the new millennium beckons. Juvenile justice, if it is to be worthy of its name, has the opportunity at the beginning of its second century to reengineer itself toward much greater social good and much less individual harm. Of all fields, juvenile justice is truly one with the ability to shape posterity, for good or for ill.

Notes

1. Of course, excruciatingly detailed qualitative work by early delinquency researchers such as Thrasher was also *empirical*, although the observations were largely qualitative rather than quantitative.
2. See: President's Commission on Law Enforcement and Administration of Justice (1968) and U.S. Department of Justice (1998).
3. The recent Juvenile Justice Action Plan (Coordinating Council on Juvenile Justice and Delinquency Prevention 1996) illustrates an uneasy balance of positivist (e.g., prevention and treatment) as well as classical principles (e.g., individual accountability and sanctions).
4. Space precludes detailed discussion here, but for excellent discussions and examples of the use of HLM (hierarchical linear modeling) to analyze criminological data, see articles by Elliott et al. (1996); Perkins and Taylor (1996); Rountree and Land (1996); Rountree, Land, and Miethe (1994); Sampson, Raudenbush, and Earls (1997); and Welsh, Greene, and Jenkins (1999).

References

- Ainsworth, Janet E. 1999. Re-imagining childhood and reconstructing the legal order: The case for abolishing the juvenile court. In *Readings in juvenile justice administration*, edited by Barry Feld. New York: Oxford University Press.
- . 1995. Youth justice in a unified court: Responses to critics of juvenile court abolition. *Boston College Law Review* 36:927–951.

Anderson, David C. 1998. Curriculum, culture, and community: The challenge of school violence. In *Youth violence*, edited by Michael Tonry and Mark H. Moore. Vol. 24 of *Crime and justice: A review of research*. Chicago: University of Chicago Press.

Anderson, Elijah. 1998. The social ecology of youth violence. In *Youth violence*, edited by Michael Tonry and Mark H. Moore. Vol. 24 of *Crime and justice: A review of research*. Chicago: University of Chicago Press.

Andrews, Donald A., Ivan Zinger, Robert D. Hoge, James Bonta, Paul Gendreau, and Francis T. Cullen. 1990. Does correctional treatment work? A clinically relevant and psychologically informed meta-analysis. *Criminology* 28:369–404.

Aries, Philippe. 1962. *Centuries of childhood*. Translated by Robert Bladick. New York: Alfred A. Knopf.

Arrigo, Bruce A., and Robert C. Schehr. 1998. Restoring justice for juveniles: A critical analysis of victim-offender mediation. *Justice Quarterly* 15 (4): 629–666.

Asquith, Stewart. 1983. *Children and justice: Decision-making in children's hearings and juvenile courts*. Edinburgh: Edinburgh University Press.

Austin, Joe, and Michael Nevin Willard. 1998. Introduction: Angels of history, demons of culture. In *Generations of youth: Youth cultures and history in twentieth-century America*, edited by Joe Austin and Michael Nevin Willard. New York: New York University Press.

Ayers, William. 1997. *A kind and just parent: The children of juvenile court*. Boston: Beacon Press.

Barak, Gregg. 1994. *Media, process, and the social construction of crime*. New York: Garland Publishing.

Barnes, Carole Wolff, and Randal S. Franz. 1989. Questionably adult: Determinants and effects of the juvenile waiver decision. *Justice Quarterly* 6 (1): 117–135.

Bastian, Lisa D., and Bruce M. Taylor. 1991. *School crime*. NCJ 131645. Washington, D.C.: U.S. Department of Justice, Bureau of Justice Statistics.

Bazemore, Gordon. 1992. On mission statements and reform in juvenile justice: The case of the “balanced approach.” *Federal Probation* 56 (3): 64–70.

Bazemore, Gordon, and Mark Umbreit. 1995. Rethinking the sanctioning function of juvenile court: Retributive or restorative responses to youth crime. *Crime & Delinquency* 41 (3): 296–316.

Beck, E.M., and Stewart E. Tolnay. 1995. Violence toward African-Americans in the era of the white lynch mob. In *Ethnicity, race, and crime: Perspectives across time and place*, edited by Darnell F. Hawkins. Albany: State University of New York Press.

- Bernard, Thomas J. 1992. *The cycle of juvenile justice*. New York: Oxford University Press.
- . 1990. Angry aggression among the “truly disadvantaged.” *Criminology* 28 (1): 73–96.
- Bernard, Thomas J., and Jeffrey B. Snipes. 1996. Theoretical integration in criminology. In *Crime and justice: A review of research*, edited by Michael Tonry. Vol. 20. Chicago: University of Chicago Press.
- Biderman, Albert D., and James P. Lynch. 1991. *Understanding crime incidence statistics: Why the UCR diverges from the NCS*. New York: Springer-Verlag.
- Bishop, Donna M., and Charles E. Frazier. 1996. Race effects in juvenile justice decision-making: Findings of a statewide analysis. *Journal of Criminal Law and Criminology* 86 (2): 392–414.
- Bishop, Donna M., Charles E. Frazier, and John C. Henretta. 1989. Prosecutorial waiver: Case study of a questionable reform. *Crime & Delinquency* 35 (2): 179–201.
- Blumstein, Alfred. 1995. Violence by young people: Why the deadly nexus? *National Institute of Justice Journal*:1–9.
- Blumstein, Alfred, Richard Curtis, Jeffrey Fagan, June Kim, Gary LaFree, Robert Nash Parker, Irving Piliavin, Richard Rosenfeld, Christopher Uggen, and Franklin E. Zimring. 1998. Crime’s decline—Why? *National Institute of Justice Journal* 237:7–21.
- Bourgois, Philippe. 1997. In search of Horatio Alger: Culture and ideology in the crack economy. In *Crack in America: Demon drugs and social justice*, edited by Craig Reinerman and Harry G. Levine. Berkeley: University of California Press.
- . 1995. *In search of respect: Selling crack in el barrio*. Cambridge: Cambridge University Press.
- Braithwaite, John. 1989. *Crime, shame, and reintegration*. Cambridge: Cambridge University Press.
- Brantingham, Paul J., and Patricia L. Brantingham, eds. 1991. *Environmental criminology*. Prospect Heights, Illinois: Waveland Press.
- Brantingham, Paul J., and C. Ray Jeffery. 1991. Afterword: Crime, space, and criminological theory. In *Environmental criminology*, edited by P.J. Brantingham and P.L. Brantingham. Prospect Heights, Illinois: Waveland Press.
- Brendtro, L.K., and N.J. Long. 1994. Violence begets violence: Breaking conflict cycles. *Journal of Emotional and Behavioral Problems: Reclaiming Children and Youth* 3:2–7.

Brooks-Gunn, Jean, Greg J. Duncan, Pamela Klato Klebanov, and Naomi Sealand. 1993. Do neighborhoods influence child and adolescent development? *American Journal of Sociology* 99:353–395.

Browning, Katherine, and Rolf Loeber. 1999. *Highlights of findings from the Pittsburgh youth study*. OJJDP Fact Sheet 95, FS–9995. Washington, D.C.: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention.

Burgess, Ernest W. [1925] 1967. The growth of the city: An introduction to a research project. In *The city*, edited by Robert E. Park, Ernest W. Burgess, and Roderick D. McKenzie. Chicago: University of Chicago Press.

Bursik, Robert J., Jr. 1988. Social disorganization and theories of crime and delinquency: Problems and prospects. *Criminology* 26:519–552.

Bursik, Robert J., Jr., and Harold Grasmick. 1993. *Neighborhoods and crime: The dimensions of effective community control*. New York: Lexington Books.

Butts, Jeffrey, and A.V. Harrell. 1998. *Delinquents or criminals: Policy options for young offenders*. Washington, D.C.: Urban Institute.

Catalano, R.F., and J.D. Hawkins. 1996. The social development model: A theory of antisocial behavior. In *Delinquency and crime: Current theories*, edited by J.D. Hawkins. New York: Cambridge University Press.

Chandler, Kathryn A., Christopher D. Chapman, Michael R. Rand, and Bruce M. Taylor. 1998. *Students' reports of school crime: 1989 and 1995*, NCES 98–241/NCJ 169607. Washington, D.C.: U.S. Departments of Education and Justice.

Chesney-Lind, Meda, and Randall G. Shelden. 1992. *Girls: Delinquency and juvenile justice*. Pacific Grove, California: Brooks/Cole Publishing Company.

Cloward, Richard, and Lloyd Ohlin. 1960. *Delinquency and opportunity*. New York: Free Press.

Cohen, Albert K. 1955. *Delinquent boys*. New York: Free Press.

Cole, George F., and Christopher E. Smith. 1998. *The American system of criminal justice*. 8th ed. Belmont, California: Wadsworth Publishing Company.

Cook, Philip J., and John H. Laub. 1998. The unprecedented epidemic in youth violence. In *Youth violence*, edited by Michael Tonry and Mark H. Moore. Vol. 24 of *Crime and justice: A review of research*. Chicago: University of Chicago Press.

Coordinating Council on Juvenile Justice and Delinquency Prevention. 1996. *Combating violence and delinquency: The National Juvenile Justice Action Plan*. NCJ 157106. Washington, D.C.: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention.

- Corley, Charles J., Timothy S. Bynum, and Madeline Wordes. 1995. Conceptions of family and juvenile court processes: A qualitative assessment. *Justice System Journal* 18 (2): 157–172.
- Curry, G. David, Robert A. Ball, and Scott H. Decker. 1996. Estimating the national scope of gang crime from law enforcement data. In *Gangs in America*, edited by C. Ronald Huff. Newbury Park, California: Sage Publications.
- Curtis, Richard. 1998. The improbable transformation of inner-city neighborhoods: Crime, violence, drugs, and youths in the 1990s. *National Institute of Justice Journal* 237 (October): 16–17.
- Dawson, Robert O. 1992. An empirical study of Kent style juvenile transfers to criminal court. *St. Mary's Law Journal* 23:975–1053.
- Day, J.C. 1996a. *Population projections of the United States by age, sex, race, and Hispanic origin: 1995 to 2050*. Current Population Reports. Washington, D.C.: U.S. Bureau of the Census.
- . 1996b. *Projections of the number of households and families in the United States: 1995–2110*. Current Population Reports. Washington, D.C.: U.S. Bureau of the Census.
- DiIulio, John J., Jr. 1997. Law enforcement can effectively combat crime. In *Juvenile crime: Opposing viewpoints*, edited by A.E. Sadler. San Diego: Greenhaven Press.
- . 1996. They're coming: Florida's youth crime bomb. *Impact* (Spring): 25–27.
- Duster, Troy. 1987. Crime, youth, and unemployment and the black underclass. *Journal of Research in Crime and Delinquency* 33:300–316.
- Elder, G. 1985. Perspectives on the life course. In *Life course dynamics*, edited by G. Elder. Ithaca, New York: Cornell University Press.
- Elliott, Delbert S. 1994. Serious violent offenders: Onset, developmental course, and termination—The American Society of Criminology 1993 Presidential address. *Criminology* 32:1–21.
- Elliott, Delbert S., David Huizinga, and Suzanne S. Ageton. 1985. *Explaining delinquency and drug use*, Newbury Park, California: Sage Publications.
- Elliott, Delbert S., David Huizinga, and Scott Menard. 1989. *Multiple problem youth: Delinquency, substance use, and mental health problems*. New York: Springer-Verlag.
- Elliott, Delbert S., William Julius Wilson, David Huizinga, Robert J. Sampson, Amanda Elliott, and Bruce Rankin. 1996. The effects of neighborhood disadvantage on adolescent development. *Journal of Research in Crime and Delinquency* 33:389–426.

Empey, LaMar. 1982. *American delinquency: Its meaning and construction*. 2d ed. Homewood, Illinois: Dorsey Press.

———. 1978. *American delinquency: Its meaning and construction*. Homewood, Illinois: Dorsey Press.

Empey, LaMar T., and Mark Stafford. 1991. *American delinquency: Its meaning and construction*. Belmont, California: Wadsworth Publishing Company.

Fagan, Jeffrey. 1996. Gangs, drugs, and neighborhood change. In *Gangs in America*, edited by C. Ronald Huff. 2d ed. Thousand Oaks, California: Sage Publications.

Fagan, Jeffrey, Ellen Slaughter, and Eliot Hartstone. 1987. Blind justice? The impact of race on the juvenile process. *Crime & Delinquency* 33 (2): 224–258.

Fagan, Jeffrey, and Deanna L. Wilkinson. 1998. Guns, youth violence, and social identity in inner cities. In *Youth violence*, edited by Michael Tonry and Mark H. Moore. Vol. 24 of *Crime and justice: A review of research*. Chicago: University of Chicago Press.

Farrington, David P. 1998. Predictors, causes, and correlates of male youth violence. In *Youth violence*, edited by Michael Tonry and Mark H. Moore. Vol. 24 of *Crime and justice: A review of research*. Chicago: University of Chicago Press.

———. 1986. Age and crime. In *Crime and justice: An annual review of research*, edited by Michael Tonry and Norval Morris. Vol. 7. Chicago: University of Chicago Press.

———. 1973. Self-reports of deviant behavior: Predictive and stable? *Journal of Criminal Law and Criminology* 64:99–110.

Farrington, David P., Rolf Loeber, Magda Stouthamer-Loeber, Welmoet B. Van Kammen, and Laura Schmidt. 1996. Self-reported delinquency and a combined delinquency seriousness scale based on boys, mothers, and teachers: Concurrent and predictive validity for African-Americans and Caucasians. *Criminology* 34:493–517.

Federle, Katherine Hunt. 1996. Emancipation and execution: Transferring children to criminal court in capital cases. *Wisconsin Law Review* 3:447–494.

Feld, Barry C. 1993a. Criminalizing the American juvenile court. In *Crime and justice: A review of research*, edited by Michael Tonry. Vol. 17. Chicago: University of Chicago Press.

———. 1993b. *Justice for children: The right to counsel and the juvenile court*. Boston: Northeastern University Press.

———. 1991. Justice by geography: Urban, suburban, and rural variations in juvenile administration. *Journal of Criminal Law and Criminology* 82 (1): 156–210.

———. 1989. The right to counsel in juvenile court: An empirical study of when lawyers appear and the difference they make. *Journal of Criminal Law and Criminology* 79:1185–1346.

———. 1988. Juvenile court meets the principle of offense: Punishment, treatment, and the difference it makes. *Boston University Law Review* 68 (5): 821–915.

Feld, Barry C., I.M. Rosenberg, and Gordon Bazemore. 1993. *The juvenile court: Dynamic, dysfunctional, or dead?* Philadelphia: Center for the Study of Youth Policy, University of Pennsylvania.

Ferraro, Kenneth F. 1994. *Fear of crime: Interpreting victimization risk*. Albany: State University of New York Press.

Ferraro, Kenneth F., and Randy L. LaGrange. 1987. The measurement of fear of crime. *Sociological Inquiry* 57:70–101.

Finestone, Harold. 1977. *Victims of change: Juvenile delinquency in American society*. Westport, Connecticut: Greenwood Press.

———. 1976. The delinquent and society: The Shaw and McKay tradition. In *Delinquency, crime, and society*, edited by James F. Short. Chicago: University of Chicago Press.

Fox, James A. 1996. *Trends in juvenile violence: A report to the United States Attorney General on current and future rates of juvenile offending*. Boston: Northeastern University Press.

Fox, Sanford J. 1970. Juvenile justice reform: An historical perspective. *Stanford Law Review* 22:1187–1239.

Gardner, Martin R. 1995. Punitive juvenile justice: Some observations on a recent trend. In *The new juvenile justice*, edited by Martin L. Forst. Chicago: Nelson-Hall.

Gibbons, Donald C. 1979. *The criminological enterprise: Theories and perspectives*. Englewood Cliffs, New Jersey: Prentice Hall.

Glueck, Sheldon, and Eleanor Glueck. 1950. *Unraveling juvenile delinquency*. Cambridge: Harvard University Press.

Gottfredson, Gary D. 1984. *The effective school battery*. Odessa, Florida: Psychological Assessment Resources, Inc.

Gottfredson, Gary D., and Denise C. Gottfredson. 1985. *Victimization in schools*. New York: Plenum Press.

Gottfredson, Michael R., and Travis Hirschi. 1990. *A general theory of crime*. Stanford, California: Stanford University Press.

———. 1987. The positive tradition. In *Positive criminology*, edited by Michael R. Gottfredson and Travis Hirschi. Newbury Park, California: Sage Publications.

Gottschalk, Rand, William S. Davidson, Jeffrey P. Meyer, and Leah K. Gensheimer. 1987. Behavioral approaches with juvenile offenders: A meta-analysis of long-term treatment efficacy. In *Behavioral approaches to crime and delinquency*, edited by E.K. Morris and C.J. Braukmann. New York: Plenum Press.

Gove, Walter R., Michael Hughes, and Michael Geerken. 1985. Are Uniform Crime Reports a valid indicator of the index crimes? An affirmative answer with minor qualifications. *Criminology* 23:451–500.

Greenbaum, Stuart. 1997. Kids and guns: From playgrounds to battlegrounds. *Juvenile justice, Journal of the Office of Juvenile Justice and Delinquency Prevention* 3 (2): 3–10.

Greenwood, Peter W. 1992. Substance abuse problems among high-risk youth and potential interventions. *Crime & Delinquency* 38:444–458.

Griffin, Patrick, Patricia Torbet, and Linda Szymanski. 1998. *Trying juveniles as adults in criminal court: An analysis of state transfer provisions*. Report, NCJ 172836. Washington, D.C.: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention.

Hagan, John. 1989. *Structural criminology*. New Brunswick, New Jersey: Rutgers University Press.

Hagedorn, John M. 1994. Neighborhoods, markets, and gang drug organization. *Journal of Research in Crime and Delinquency* 31:264–294.

———. 1991. Gangs, neighborhoods, and public policy. *Social problems* 38:529–542.

———. 1988. *People and folks: Gangs, crime, and the underclass in a Rustbelt city*. Chicago: Lake View Press.

Haller, Mark H. [1963] 1984. *Eugenics: Hereditarian attitudes in American thought*. New Brunswick, New Jersey: Rutgers University Press.

Hanna, J.L. 1988. *Disruptive school behavior: Class, race, and culture*. New York: Holmes and Meier.

Hawkins, J.D., and R.F. Catalano. 1995. *Risk-focused prevention: Using the social development strategy*. Seattle: Developmental Research and Programs.

———. 1992. *Communities that care: Action for drug abuse prevention*. San Francisco: Jossey-Bass.

Hindelang, Michael J. 1973. Causes of delinquency: A partial replication and extension. *Social problems* 20:471-487.

Hindelang, Michael J., Travis Hirschi, and Joseph G. Weis. 1981. *Measuring delinquency*. Beverly Hills: Sage Publications.

Hirschi, Travis. 1969. *Causes of delinquency*. Berkeley: University of California Press.

Hirschi, Travis, and Michael Gottfredson. 1993. Rethinking the juvenile justice system. *Crime & Delinquency* 39 (2): 262-271.

———. 1983. Age and the explanation of crime. *American Journal of Sociology* 89:522-584.

Howell, James C. 1997. *Juvenile justice and youth violence*. Thousand Oaks, California: Sage Publications.

Howell, James C., ed. 1995. *Guide for implementing the comprehensive strategy for serious, violent, and chronic juvenile offenders*. NCJ 153681. Washington, D.C.: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention.

Huizinga, David, and Delbert S. Elliott. 1986. Reassessing the reliability and validity of self-report delinquency measures. *Journal of Quantitative Criminology* 2:293-327.

Humes, Edward. 1996. *No matter how loud I shout: A year in the life of juvenile court*. New York: Simon & Schuster.

Investor's Business Daily. 1999. A generation of workers. 30 April.

Kappeler, Victor E., Mark Blumberg, and Gary W. Potter. 1996. *The mythology of crime and criminal justice*. 2d ed. Prospect Heights, Illinois: Waveland Press.

Kazdin, A.E. 1987. *Conduct disorders in childhood and adolescence*. Newbury Park, California: Sage Publications.

Kelley, Barbara T., David Huizinga, Terence P. Thornberry, and Rolf Loeber. 1997. *Epidemiology of serious violence*. Research Report, NCJ 165152. Washington, D.C.: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention.

Kennedy, David M. 1997. *Juvenile gun violence and gun markets in Boston*. Research Preview, FS 000160. Washington, D.C.: U.S. Department of Justice, National Institute of Justice.

Kennedy, Randall. 1997. *Race, crime, and the law*. New York: Random House.

Klein, Malcolm W. 1995. *The American street gang*. New York: Oxford University Press.

- Krisberg, Barry, and James Austin. 1993. *Reinventing juvenile justice*. Newbury Park, California: Sage Publications.
- LaFree, Gary. 1998. *Losing legitimacy: Street crime and the decline of social institutions in America*. Boulder, Colorado: Westview Press.
- LaGrange, Randy L., and Kenneth F. Ferraro. 1989. Assessing age and gender differences in perceived risk and fear of crime. *Criminology* 27:697–719.
- Lawrence, Richard A. 1998. *School crime and juvenile justice*. New York: Oxford University Press.
- LeBlanc, Marc, and Rolf Loeber. 1998. Developmental criminology updated. In *Crime and justice: A review of research*, edited by Michael Tonry. Vol. 23. Chicago: University of Chicago Press.
- Lee, Leona. 1994. Factors determining waiver in a juvenile court. *Journal of Criminal Justice* 22 (4): 329–339.
- Loeber, Rolf, and David P. Farrington, eds. 1998. *Serious and violent juvenile offenders: Risk factors and successful interventions*. Thousand Oaks, California: Sage Publications.
- Maguire, Kathleen, and Ann L. Pastore. 1999. Section 4: Introduction, and Table 4.7: Arrests by offense charged and age, United States, 1997. *Sourcebook of criminal justice statistics online*. Retrieved 3 January 2000 from the World Wide Web: <http://www.albany.edu/free-tops/docs.sourcebook/1995/about.html>.
- . 1997. *Sourcebook of criminal justice statistics—1996*. Washington, D.C.: U.S. Department of Justice, Bureau of Justice Statistics.
- Matza, David. 1964. *Delinquency and drift*. New York: John Wiley & Sons.
- Matza, David, and Gresham M. Sykes. 1961. Juvenile delinquency and subterranean values. *American Sociological Review* 26:712–719.
- McCarthy, Belinda R., and Brent L. Smith. 1986. The conceptualization of discrimination in the juvenile justice process: The impact of administrative factors and screening decisions in juvenile court dispositions. *Criminology* 24 (1): 41–64.
- McKenzie, Roderick D. 1925. The ecological approach to the study of the human community. In *The city*, edited by R.E. Park, E.W. Burgess, and R.D. McKenzie. Chicago: University of Chicago Press.
- Mennel, Richard. 1973. *Thorns and thistles*. Hanover, New Hampshire: University Press of New England.
- Messner, Steven F., and Richard Rosenfeld. 1997. *Crime and the American dream*. 2d ed. Belmont, California: Wadsworth Publishing Company.

Miller, Jerome G. 1991. *Last one over the wall: The Massachusetts experiment in closing reform schools*. Columbus: Ohio State University Press.

Miller, Jody. 1998. Gender and victimization risk among young women in gangs. *Journal of Research in Crime and Delinquency* 35:429–453.

Moore, Mark H. 1995. Public health and criminal justice approaches to prevention. In *Crime and justice: A review of research*, edited by Michael Tonry. Vol. 19. Chicago: University of Chicago Press.

———. 1987. *From children to citizens, volume I: The mandate for juvenile justice*. New York: Springer-Verlag.

Moore, Mark H., and Michael Tonry. 1998. Youth violence in America. In *Youth violence*, edited by Michael Tonry and Mark H. Moore. Vol. 24 of *Crime and justice: A review of research*. Chicago: University of Chicago Press.

Morgan, Gareth. 1997. *Images of organization*. 2d ed. Thousand Oaks, California: Sage Publications.

National School Boards Association. 1993. *Violence in the schools: How America's school boards are safeguarding our children*. Alexandria, Virginia: National School Boards Association.

Park, Robert E., Ernest W. Burgess, and Roderick D. McKenzie, eds. [1925] 1967. *The city*. Chicago: University of Chicago Press.

Perkins, Douglas D., and Ralph B. Taylor. 1996. Ecological assessments of community disorder: Their relationship to fear of crime and theoretical implications. *American Journal of Community Psychology* 24:63–107.

Platt, Anthony M. 1977. *The child savers: The invention of delinquency*. 2d ed. enlarged. Chicago: University of Chicago Press.

Podkopacz, Marcy Rasmussen, and Barry C. Feld. 1996. The end of the line: An empirical study of judicial waiver. *Journal of Criminal Law and Criminology* 82 (2): 449–492.

Poe-Yamagata, Eileen. 1998. The number of youth under age 18 and their proportion of the population, 1950–2020. Adapted from Federal Interagency Forum on Child and Family Statistics. *America's children: Indicators of well-being, 1998* [HTML File]. Washington, D.C. Retrieved 10 December 1998 from the *Office of Juvenile Justice and Delinquency Prevention Statistical Briefing Book* from the World Wide Web: <http://ojjdp.ncjrs.org/ojstatbb/qa071.html>.

Poulos, Tammy Meredith, and Stan Orchowsky. 1994. Serious juvenile offenders: Predicting the probability of transfer to juvenile court. *Crime & Delinquency* 40 (1): 3–17.

- President's Commission on Law Enforcement and Administration of Justice. 1968. *The challenge of crime in a free society*. New York: Avon Books.
- Quinney, Richard. 1970. *The social reality of crime*. Boston: Little, Brown and Company.
- Reiss, Albert J., Jr., and Jeffrey A. Roth, eds. 1993. *Understanding and preventing violence*. Vol. 1. Washington, D.C.: National Academy Press.
- Rosenberg, I.M. 1993. Leaving bad enough alone: A response to the juvenile court abolitionists. *Wisconsin Law Review* 1:163–185.
- Roth, Jeffrey. 1994. *Understanding and preventing violence*. Research in Brief, NCJ 145645. Washington, D.C.: U.S. Department of Justice, National Institute of Justice.
- Rothman, David. 1980. *Conscience and convenience: The asylum and its alternatives in progressive America*. Boston: Little, Brown and Company.
- Rountree, Pamela Wilcox, and Kenneth C. Land. 1996. Perceived risk versus fear of crime: Empirical evidence of conceptually distinct reactions in survey data. *Social Forces* 74:1353–1376.
- Rountree, Pamela Wilcox, Kenneth C. Land, and Terance D. Miethe. 1994. Macro-micro integration in the study of victimization: A hierarchical logistic model analysis across Seattle neighborhoods. *Criminology* 32:387–414.
- Sampson, Robert J., and Janet L. Lauritsen. 1993. Violent victimization and offending: Individual-, situational-, and community-level risk factors. In *Understanding and Preventing Violence: Social Influences*, edited by Albert J. Reiss, Jr., and Jeffrey A. Roth. Vol. 3. Washington, D.C.: National Academy Press.
- Sampson, Robert J., Stephen W. Raudenbush, and Felton Earls. 1997. Neighborhoods and violent crime: A multilevel study of collective efficacy. *Science* 277:918–924.
- Schlossman, S., and M. Sedlak. 1983. The Chicago area project. *Crime & Delinquency* 29:398–462.
- Schwartz, Ira M., Neil Alan Weiner, and Guy Enosh. 1998. Nine lives and then some: Why the juvenile court does not roll over and die. *Wake Forest Law Review* 33:533–552.
- Shaw, Clifford R., and Henry D. McKay. 1942. *Juvenile delinquency and urban areas*. Chicago: University of Chicago Press.
- Sheley, Joseph F., Zina T. McGee, and James W. Wright. 1995. *Weapon-related victimization in selected inner-city high school samples*. NCJ 151526. Washington, D.C.: U.S. Department of Justice, National Institute of Justice.

Sheley, Joseph F., and James D. Wright. 1993. *Gun acquisition and possession in selected juvenile samples*. Research Report, NCJ 145326. Washington, D.C.: U.S. Department of Justice, National Institute of Justice.

Short, James F., Jr. 1998. The level of explanation problem revisited—The American Society of Criminology 1997 Presidential address. *Criminology* 36:3–36.

Short, James F., Jr., and F. Ivan Nye. 1958. Extent of unrecorded juvenile delinquency: Tentative conclusions. *Journal of Criminal Law and Criminology* 49:296–302.

Sickmund, Melissa. 1997. Percent change in the public custody facility population, 1983–1995. Adapted from M. Sickmund, H. Snyder, and E. Poe-Yamagata. *Juvenile offenders and victims: 1997 update on violence, OJJDP Statistical Briefing Book*. [HTML File] or [Adobe Acrobat File]. Washington, D.C.: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention. Retrieved 10 December 1999 from the World Wide Web: <http://ojjdp.ncjrs.org/ojstatbb/qa057.html>.

Singer, Simon I. 1998. Criminal and teen courts as loosely coupled systems of juvenile justice. *Wake Forest Law Review* 33 (3): 509–532.

———. 1996. *Recriminalizing delinquency: Violent juvenile crime and juvenile justice reform*. New York: Cambridge University Press.

Skovron, Sandra Evans, Joseph E. Scott, and Francis T. Cullen. 1995. The death penalty for juveniles: An assessment of public support. In *The new juvenile justice*, edited by Martin L. Forst. Chicago: Nelson-Hall.

Smith, Kristin E., and Amara Bachu. 1999. Women's labor force attachment patterns and maternity leave: A review of the literature. *Population Division Working Paper No. 32*. Washington, D.C.: U.S. Bureau of the Census, Population Division. Retrieved 3 January 2000 from the World Wide Web: <http://www.census.gov/population/www/documentation/twps0032/twps0032.html#Labor Force Participation Pre-FMLA>.

Snyder, Howard N. 1999. Violent juvenile crime: The number of violent juvenile offenders declines. *Corrections Today* (April): 96–100.

———. 1998. *Juvenile arrests 1997*. Juvenile Justice Bulletin, NCJ 173938. Washington, D.C.: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention.

Snyder, Howard N., and Melissa Sickmund. 1995. *Juvenile offenders and victims: A focus on violence*. Statistics Summary, NCJ 153570. Washington, D.C.: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention.

Snyder, Howard N., Melissa Sickmund, and Eileen Poe-Yamagata. 1996. *Juvenile offenders and victims: 1996 update on violence*. Statistics Summary, NCJ 159107. Washington, D.C.: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention.

Steffensmeier, Darrell, Emilie Anderson Allen, Miles Harer, and Cathy Streifel. 1989. Age and the distribution of crime. *American Sociological Review* 94:803–831.

Sutton, John R. 1985. The juvenile court and social welfare: Dynamics of progressive reform. *Law & Society Review* 19 (1): 107–145.

Sykes, Gresham M., and David Matza. 1957. Techniques of neutralization: A theory of delinquency. *American Journal of Sociology* 22:664–670.

Szymanski, Lynn. 1997. State variations in age restrictions for trying juveniles in criminal court. *NCJJ Snapshot* 2 (2). Pittsburgh: National Center for Juvenile Justice.

Thornberry, Terrence P. 1987. Toward an interactional theory of delinquency. *Criminology* 25:863–887.

Thornberry, Terrence P., ed. 1997. *Developmental theories of crime and delinquency: Advances in theoretical criminology*. Vol. 7. Piscataway, New Jersey: Transaction Publishers.

Thornberry, Terrence P., Melanie Moore, and R.L. Christenson. 1993. The effect of dropping out of high school on subsequent criminal behavior. *Criminology* 23:3–18.

Thrasher, Frederick. 1927. *The gang*. Chicago: University of Chicago Press.

Torbet, Patricia, Richard Gable, Hunter Hurst IV, Imogene Montgomery, Linda Szymanski, and Douglas Thomas. 1996. *State responses to serious and violent juvenile crime*. NCJ 161565. Washington, D.C.: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention.

U.S. Bureau of the Census. 1999a. Historical poverty tables—Families, table 13. Retrieved 3 January 2000 from the World Wide Web: <http://www.census.gov/income/histpov/histovpov13.txt>.

———. 1999b. Historical poverty tables—Families, table 4. Retrieved 3 January 2000 from the World Wide Web: <http://www.census.gov/income/histpov/histovpov4.txt>.

———. 1998. Sociodemographic tables—School, tables A1–A5. Retrieved 3 January 2000 from the World Wide Web: <http://www.census.gov/prod/3/98pubs/p20-5000.pdf>.

U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. 1995. Surveillance summaries: Youth risk behavior surveillance—United States. *Morbidity and Mortality Weekly Report* 44 (No. SS–1). Atlanta.

U.S. Department of Justice, Office of Justice Programs. 1998. *The challenge of crime in a free society: Looking back, looking forward*. Symposium on the 30th Anniversary of the President's Commission on Law Enforcement and Administration of Justice, NCJ 170029. Washington, D.C.

- Vold, George B., Thomas J. Bernard, and Jeffrey B. Snipes. 1998. *Theoretical criminology*. 4th ed. New York: Oxford University Press.
- Welsh, Wayne N. In press. Teen violence in the U.S.A. In *Teen violence: A global perspective*, edited by Randall Summers and Allan Hoffman. Westport, Connecticut: Greenwood Press.
- . 2000. Effects of school climate on school disorder. *Annals of the American Association of Political and Social Science* 567:88–107.
- Welsh, Wayne N., Jack R. Greene, and Patricia H. Jenkins. 1999. School disorder: The influence of individual, institutional, and community factors. *Criminology* 37:73–115.
- . 1998. *Effects of school climate on measures of student fear, victimization, and offending*. Paper presented at the Annual Meeting of the American Society of Criminology, 11 November, Washington, D.C.
- Welsh, Wayne N., and Philip W. Harris. 1999. *Criminal justice policy and planning*. Cincinnati: Anderson Publishing Company.
- Welsh, Wayne N., Philip W. Harris, and Patricia H. Jenkins. 1996. Reducing overrepresentation of minorities in juvenile justice: Development of community-based programs in Pennsylvania. *Crime & Delinquency* 42 (1): 76–98.
- Welsh, Wayne N., Patricia H. Jenkins, and Jack R. Greene. 1999. *Effects of school climate on student misconduct*. Paper presented at the Annual Meeting of the Academy of Criminal Justice Sciences, 10 March, Orlando.
- . 1997. *Building a culture and climate of safety in public schools in Philadelphia: School-based management and violence reduction*. Final Report submitted to the National Institute of Justice and the Center for Public Policy, Temple University, Philadelphia.
- Welsh, Wayne N., Patricia H. Jenkins, and Philip W. Harris. 1999. Reducing minority overrepresentation in juvenile justice: Results of community-based delinquency prevention in Harrisburg. *Journal of Research in Crime and Delinquency* 36:87–110.
- Welsh, Wayne N., Robert Stokes, and Jack R. Greene. In press. A macro-level model of school disorder. *Journal of Research in Crime and Delinquency* 37.
- Whitaker, C.J., and L.D. Bastian. 1991. *Teenage victims: A national crime survey report*. NCJ 128129. Washington, D.C.: U.S. Department of Justice, Bureau of Justice Statistics.
- Whyte, William Foote. 1943. *Street corner society*. Chicago: University of Chicago Press.
- Williams, Terry. 1989. *The cocaine kids*. Reading, Massachusetts: Addison-Wesley.

Wilson, John J., and James C. Howell. 1993. *A comprehensive strategy for serious, violent, and chronic juvenile offenders*. Research Report, NCJ 143453. Washington, D.C.: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention.

Wilson, William Julius. 1987. *The truly disadvantaged: The inner city, the underclass, and public policy*. Chicago: University of Chicago Press.

Winner, Lawrence, Lon Lanza-Kaduce, Donna M. Bishop, and Charles E. Frazier. 1997. The transfer of juveniles to criminal court: Reexamining recidivism over the long term. *Crime & Delinquency* 43 (4): 548–563.

Wizner, Stephen. 1995. On youth crime and the juvenile court. *Boston College Law Review* 36:1025–1035.

Zimring, Franklin E., and Gordon Hawkins. 1998. *Youth violence*. New York: Oxford University Press.

Changes in the Gender Gap in Crime and Women's Economic Marginalization

by Karen Heimer

One of the most persistent research findings in criminology is that men commit much more crime than women. This typically is referred to as the gender gap in offending. Many researchers have noted that during the past several decades, women and men have converged in their rates of crime and the gender gap in offending has narrowed. Several explanations of this convergence have been proposed, including the economic marginalization hypothesis, which argues that the gender gap in crime has narrowed because women have experienced increasing economic hardship relative to men. This article reviews research on changes over time in the relative crime of women and men. It presents an analysis of Uniform Crime Reports data on the gender gap in offending from 1960 to 1997 and concludes that there has been an appreciable narrowing of the gap over this period in both property and violent offenses. The article then assesses the evidence in the criminological literature regarding the possible reasons for these changes, including the economic marginalization hypothesis. It then reviews evidence from demographic and economic research regarding the increasing marginalization of women and concludes that changes in the gender gap in crime are consistent with the findings of this research. Finally, the article proposes avenues for extending and refining the economic marginalization perspective.

Karen Heimer is Associate Professor at the University of Iowa in Iowa City.

One aspect of the gender gap in crime that has attracted significant attention within the research community as well as the media is the observation that the gender gap has narrowed somewhat over time. Several explanations of this phenomenon have been offered, but one of the most widely endorsed today is the economic marginalization hypothesis, which proposes that the reduction in the gender gap in crime is associated with increases over time in the financial instability of women.

The gender gap in crime—with males accounting for much more law violation than females—is virtually a truism in criminology. The relationship holds regardless of whether the data analyzed are arrest rates, victimization incidence reports on characteristics of offenders, or self-reports of criminal behavior. As far as we can tell, males have always been more criminal than females, and gender differences emerge in every society that has been studied systematically. Yet, criminologists have not yet uncovered definitive reasons for the gender gap or gender ratio of crime. The persistence and prevalence of gender differences in offending make the unresolved puzzle of the source of these differences all the more troubling.

One aspect of the gender gap in crime that has attracted significant attention within the research community as well as the media is the observation that the gender gap has narrowed somewhat over time. Several explanations of this phenomenon have been offered, but one of the most widely endorsed today is the economic marginalization hypothesis, which proposes that the reduction in the gender gap in crime is associated with increases over time in the financial instability of women. More specifically, the marginalization hypothesis predicts that when women become more economically disadvantaged *as compared with* men, women's rates of crime *as compared with* men's rates will increase. The thesis is inherently comparative in nature, and the concept of economic marginalization refers specifically to the situation in which women's economic well-being is not keeping pace with men's economic well-being—women are becoming more economically disadvantaged relative to men. Some

research that invokes the economic marginalization argument focuses on a variant of the hypothesis, maintaining that the narrowing of the gender gap in offending reflects increases in women's crime rates and is explained by increases in rates of women's (absolute) poverty. As I discuss in "Trends in Relative Crime Rates of Women and Men" in this paper, however, recent changes in the gender gap in crime do not always occur because women's crime rates increase;

they may also occur when female crime rates either decline more slowly than male crime rates or when female rates remain constant while male rates decrease.

Only a few studies have assessed the economic marginalization hypothesis directly, and these have provided only partial support. There are compelling reasons, however, to believe that changes in the gender gap in offending covary with changes in the economic well-being of women as compared with men. A large number of social demographic and economic indicators provide evidence of trends in the economic marginalization of women in the United States that roughly parallel changes in the gender gap in crime.

This primary goal of this article is to assess evidence from existing research bearing on the economic marginalization hypothesis. To this end, I first review research on trends in the gender gap in crime (i.e., changes in women's crime rates relative to those of men) and then present recent data on these trends. I then assess the major explanations that have been proposed to account for changes in the gender gap or gender ratio of crime, including the economic marginalization hypothesis. Next, I discuss cross-sectional research on women's crime and poverty, with an eye toward drawing out implications for extending the economic marginalization thesis. I then assess the evidence on the changes in the economic well-being of women in the social demographic and economic literatures and link the major trends reported in this research to changes in gender ratios of crime. Finally, I suggest avenues for further elaborating economic marginalization arguments.

Trends in Relative Crime Rates of Women and Men

Many researchers have observed that female arrest rates have increased relative to male arrest rates since World War II in the United States (e.g., Simon and Landis 1991). There is some disagreement, however, about the importance of these changes. Some researchers maintain that substantial changes are limited to a few offense categories, such as the less serious crimes of larceny and fraud; other researchers argue that there have been important changes in more serious crimes as well. I review these arguments here and then present data on the relative arrest rates of females and males from 1960 to 1997, demonstrating that there have been important changes in arrests across a number of Index crimes in the Uniform Crime Reports (UCR). However, these trends must be interpreted in light of several measurement issues.

Measurement issues

Because self-report studies of offending typically focus on juveniles rather than adults, and because even longitudinal self-report studies typically cover relatively short windows of time, researchers interested in examining changes in gender ratios of crime over time have used official measures of crime, such as the UCR arrest data. Problems in using the UCR data are documented extensively (O'Brien 1985). One of the most widely recognized problems with UCR arrest data is that they represent only a small fraction of all crimes committed. Yet, assuming that the degree of underestimation is relatively constant over time, most researchers agree that comparisons of trends in UCR arrest data are reasonably valid. A related issue is that research shows that the UCR arrests are probably better measures of more serious than less serious crimes. Finally, there were changes in the collection of the UCR data in the late 1950s; most recent studies of changes in the relative offending of females and males therefore have used UCR arrest data from 1960 onward.

Another important issue for comparisons of female and male arrests is potential bias in arrest decisions of women as compared with men. Many researchers suggest that the police may show more leniency to women in arrest decisions and that this effect may change over time. Hindelang (1981) shows, however, that data from the National Crime Victimization Survey's incidence reports produce a distribution of sex differences in offending similar to the distribution of sex differences in UCR arrest data. This indicates that if gender bias in arrest decisions exists, it is probably not large.

Beyond issues pertaining to the use of arrest data, early research on changes in women's crime was plagued by several critical methodological problems. Box (1983, 191) has enumerated these as follows (see also Steffensmeier and Streifel 1992, 83): First, many early studies failed to take into account changes in the size of the female population; consequently, they could not disentangle changes in women's crime from population growth. Second, few early studies considered changes in men's crime rates and therefore did not recognize that, if both are undergoing similar absolute changes, the *relative* change in female as compared with male crime could be trivial. Third, some research did not disaggregate women's crime rates into component types, which can mask important changes that occur in some crimes but not in others. Fourth, much of the research has not specified and measured rigorously variables that are predicted to be associated with trends in women's offending. Fifth, few studies have used statistical tests to assess changes in women's crime.

More recent research on trends in women's crime has overcome the first three of these problems by examining specific offenses separately, computing arrest

rates for women that are adjusted for the size of the population of women of a given age, and comparing these to similarly adjusted arrest rates for men. The measures computed from these population sex- and age-adjusted arrest rates assess changes in female offending *relative* to male offending. A commonly used measure compares the sex- and age-adjusted arrest rates for women with the sex- and age-adjusted arrest rates of the total population (women plus men). This measure captures the proportion of all arrests accounted for by women. A second measure of women's offending relative to men is the sex- and age-adjusted arrest rates for women compared with the sex- and age-adjusted arrest rates for men. This is the gender ratio of offending and is interpreted as the number of female arrests per every male arrest. These two measures are essentially numerically equivalent in the case when the gender ratio is small (i.e., male crime greatly exceeds female crime; the gender gap is large), which is the case for all UCR arrest categories examined in this article.

The last two problems with research on trends in the gender gap in offending—the lack of statistical tests of change over time and the inclusion of predictors of this change in a statistical model—are addressed by some studies but not others; these issues are discussed further in “Trends in Relative Crime Rates of Women and Men.”

Previous research findings

Simon (1975, 1976) conducted one of the earliest studies of changes in gender ratios of crime in the United States, finding convergence in women's and men's UCR arrest rates between 1960 and 1970 for larceny, fraud, forgery, and embezzlement. She reported that the greatest change occurred during the late 1960s (1976, tables 4.5 and 4.7). However, she found that this convergence was confined primarily to white-collar property offending—there was little evidence of change in violent crimes during this period. Noblit and Burcart (1976) similarly find large changes in property crimes during the same period, but they also report a doubling in the arrests of robbery among women (note, however, that their calculations of change did not take into account the figures for the age and sex composition of the population). As was typical of these early studies, both the Simon and the Noblit and Burcart studies examined only female offending and did not consider that the changes they reported also may have occurred among males.

The most extensive work on changes in female arrest rates in the United States is that of Steffensmeier and his colleagues (e.g., Steffensmeier 1978; Steffensmeier and Cobb 1981; Steffensmeier and Allan 1988, 1996). These researchers use population-adjusted UCR arrest data and focus on either gender

ratios of arrests or the proportion of all arrests accounted for by females, as discussed previously. Steffensmeier and his colleagues argue that the changes in female offending vis-a-vis changes in male offending between 1935 and 1990 are small and not substantively important for most offenses (see Steffensmeier and Cobb 1981; Steffensmeier and Allan 1996). However, they report substantial changes in larceny, embezzlement, and fraud. Based on these patterns, Steffensmeier and his associates maintain that changes in female offending have been modest, overall, and have been limited mainly to property offenses.

Other researchers examining population-adjusted UCR arrest data view changes in traditionally "male" crimes as potentially important as well. LaFree (1998, 40-42), for example, finds that the ratio of arrests for female to male robberies, burglaries, and auto thefts increased between 1965 and 1992, narrowing the gender gap in these offenses. Although the rates of male arrests for these offenses continued to be much higher than rates of female arrests throughout this period, LaFree concludes that there has been "modest convergence," with females becoming more similar to males in arrests for robbery, burglary, and auto theft, as well as larceny (42). Similarly, Austin (1982) examines UCR arrest data from the late 1950s to the mid-1970s and concludes that there were substantively important increases in females' contribution to arrests for the serious crimes of burglary, robbery, and auto theft, as well as the less serious offenses of larceny, fraud, and embezzlement. Finally, Giordano, Kerbel, and Dudley (1981) analyze police blotters from Toledo, Ohio, for the period 1890 through 1976 and report evidence of convergence in the gender gap in arrests over this period for minor property crimes, as well as for robbery, burglary, aggravated assault, and other assault.

Because the UCR arrest data cannot be disaggregated simultaneously by sex and race, they cannot be used to ascertain the extent of minority versus white arrests among females. Victimization data on incidents, however, show that there are significant differences across race in women's offending, just as in men's offending (Hindelang 1981). Chilton and Datesman (1987) offer indirect evidence of the race effect in a study that links UCR data on increases in larceny arrests for five large U.S. cities between 1960 and 1980 with census data on the age, race, and gender composition of the cities. They deduce that the bulk of the increase in female arrests for larceny can be attributed to increased arrests of African-American women. By contrast, Steffensmeier and Allan (1988) analyze data collected by the Pennsylvania Uniform Crime Reporting System and find that African-American women are comparable to white women in their involvement in property, drug, and sex-related crimes; however, they find that African-American women account for a disproportionately large percentage of violent crime. Although the evidence on race is somewhat inconsistent at this point, it

seems reasonable to suspect that there are important race differences in arrests among women. Unfortunately, because so few studies examine the role of race, and because the UCR arrest data do not contain sex-by-race breakdowns, race differences in the relative offending of women and men will not be addressed in the present article. It is, however, a crucial issue for future research, as I argue at the end of this article in "Toward a More Complete Explanation of Changes in Gender Ratios of Crime."

Trends in the gender gap in crime, 1960–97

The most recently published discussions of gender ratios in offending present data up through 1992 (LaFree 1998) and 1990 (Steffensmeier and Allan 1996). Consequently, trends in gender ratios of arrests during the 1990s have not been examined to date. However, there have been important changes in the relative offending of women and men since 1990. In addition, inclusion of the 1990s allows for the assessment of longer term trends than was possible in previous research.

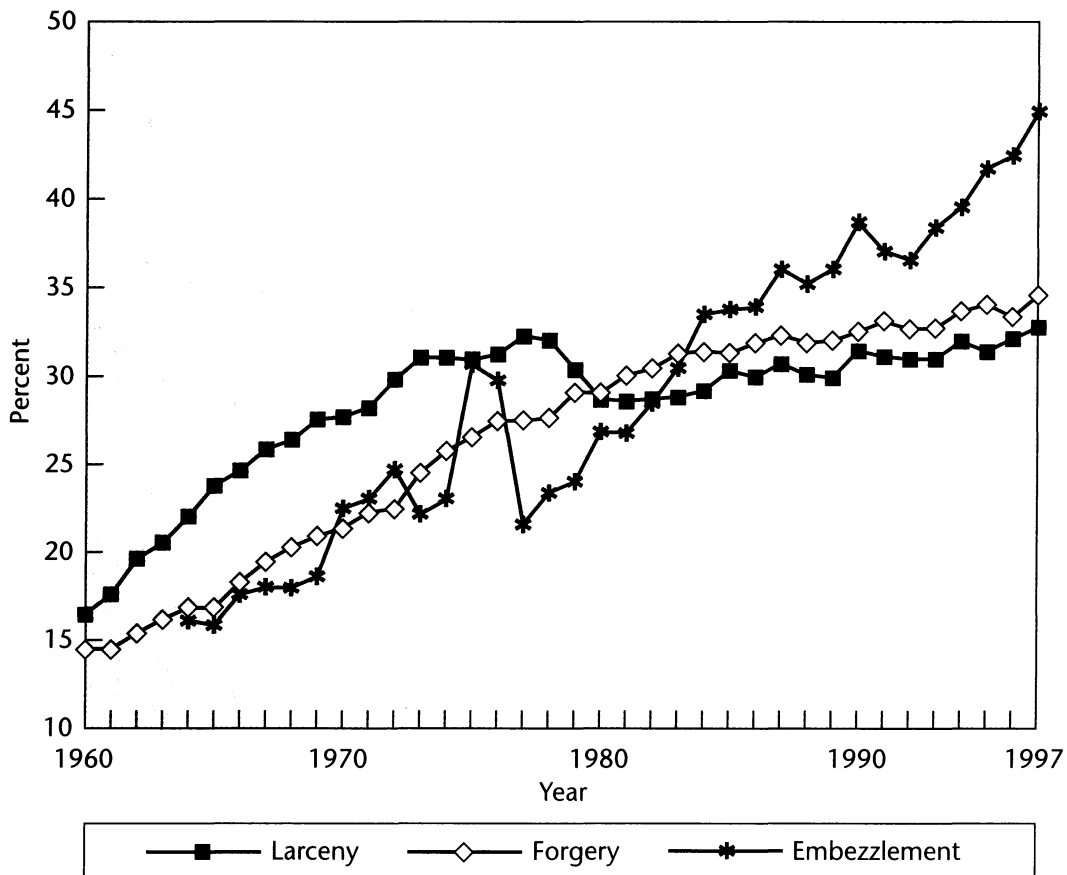
Exhibits 1 through 6 are based on UCR arrest data from 1960 through 1997 for select offenses.¹ The 1960 data are used as the starting point, because this is the year in which the UCR coverage was extended to cover nonurban as well as urban jurisdictions, as discussed above. The data here are unpublished data obtained from the FBI that include data only from jurisdictions that reported 12-month complete data.² The data points presented in these exhibits cover 37 years, which is a longer series than has been analyzed in much of the previous research on trends in the gender gap in crime. Exhibits 1 through 3 depict changes in the percentage of all arrests that are accounted for by arrests of females, which is referred to as female contribution to arrests; exhibits 4 through 6 depict changes in the gender ratio of arrests. All rates are for adults only and are adjusted by the age and sex composition of the population.³

There is an upward trend between 1960 and 1997 in women's contributions to arrests for all crimes except murder, which shows a consistent downward trend since the early 1960s. An analysis of each of the individual offenses shows which crimes increased more and roughly when these increases occurred.

First, the percentages of arrests for larceny and forgery accounted for by women increased throughout this period (exhibits 1 and 4), with females accounting for 32.9 percent of larceny and 34.7 percent of forgery arrests by 1997. Recent trends thus continue the earlier trends in the gender ratios of these offenses, as described by Steffensmeier and his associates and other researchers. As exhibit 1 shows, the proportion of larcenies accounted for by women reached a post-1960 high point in the late 1970s and then dipped downward before beginning

to move upward again in the early 1980s. Many of the studies discussed above focus on the period before 1975 and thus draw attention to the earlier upward trend, which is somewhat steeper than the later trend in the gender ratio of larceny arrests. An examination of male and female rates separately reveals that increases in the gender ratio of larceny since 1985 occurred because, although larceny declined among both genders, female rates dropped off rather gradually while male rates decreased more sharply. This raises an interesting question: Why has female offending *not* mirrored the declines in male offending in recent years? The gender ratio of arrests for forgery, by comparison, has increased

Exhibit 1. Female contribution to arrests for property crimes (larceny, forgery, and embezzlement)



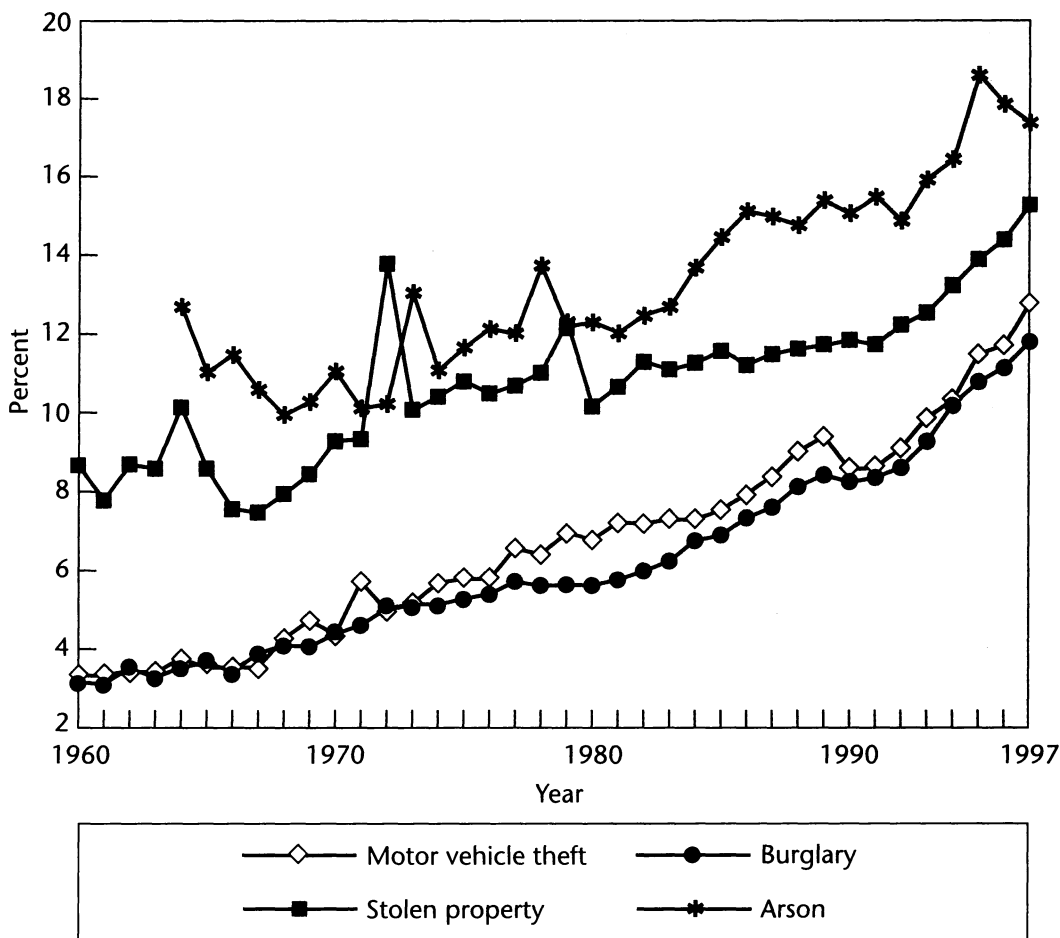
Note: Female contribution to crime is computed as $[100\{female\ arrest\ rate/(female\ arrest\ rate+male\ arrest\ rate)\}]$ and is interpreted as percentage of all arrests of persons 18 and over accounted for by females over 18.

Source: Data are unpublished UCR arrest data for 12-month complete jurisdictions, obtained from the FBI.

rather steadily since 1960. The increase over recent years in the gender ratio of forgery occurs because male rates declined somewhat while female rates increased.

Overall, the increases in the gender ratios of larceny and forgery arrests are substantial. I verify this conclusion statistically by estimating Poisson regression models of change in the gender ratios in larceny and forgery from 1965 to 1995, a three-decade period. Poisson regression is often useful for modeling

Exhibit 2. Female contribution to arrests for property crimes (motor vehicle theft, burglary, stolen property, and arson)

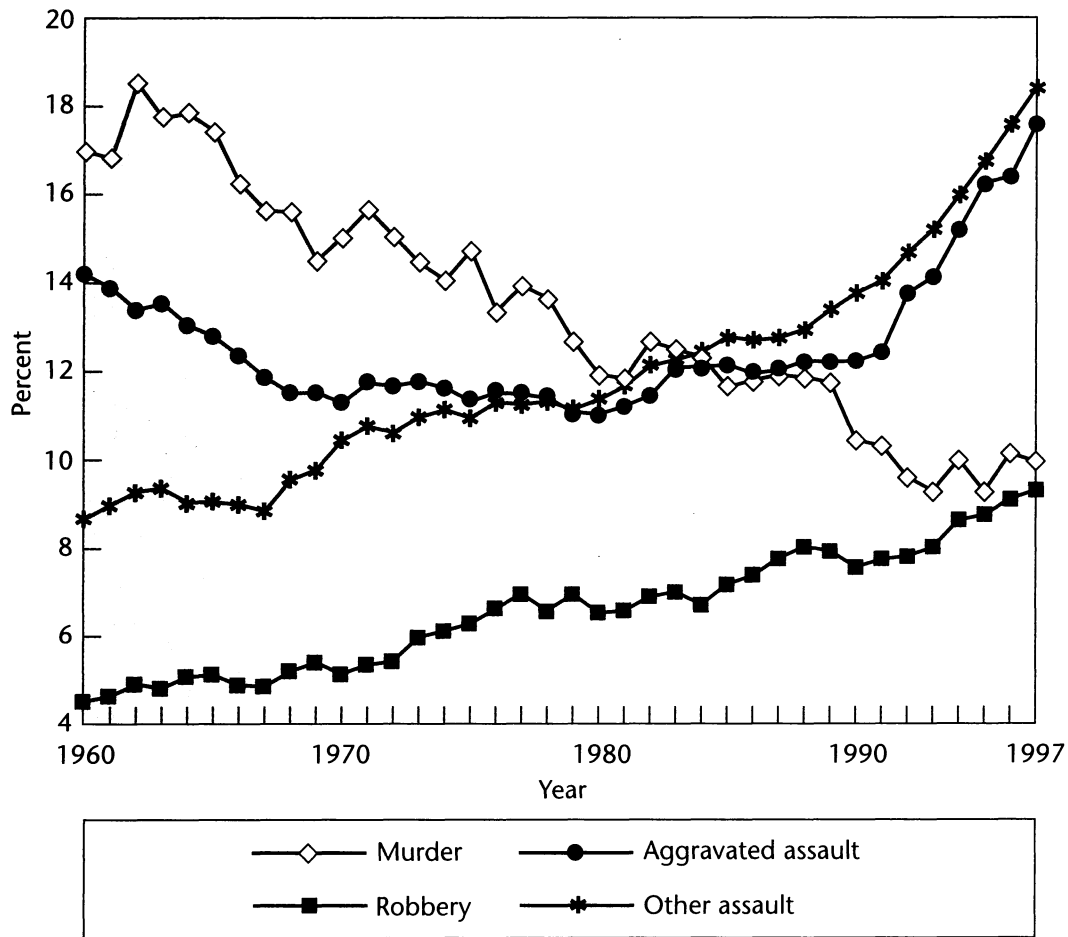


Note: Female contribution to crime is computed as $[100\{\text{female arrest rate}/(\text{female arrest rate}+\text{male arrest rate})\}]$ and is interpreted as percentage of all arrests of persons 18 and over accounted for by females over 18.

Source: Data are unpublished UCR arrest data for 12-month complete jurisdictions, obtained from the FBI.

count or rate data, particularly when there is a small number of large counts, as in crime rate data (see endnote for details of the procedure).⁴ Estimation of these models shows that the changes in both the gender ratios of larceny and forgery from 1965 to 1995 are highly significant (both $p < 0.0001$). The results also show that the gender ratio of forgery arrests increased 153 percent between 1965 and 1995 and increased 13 percent between 1985 and 1995 ($p < 0.0001$). The estimates also reveal that the gender ratio of larceny increased 46 percent from 1965 to 1995 but only 5 percent during the third decade, from 1985 to 1995 (although this increase is significant at $p < 0.0001$).

Exhibit 3. Female contribution to arrests for violent crimes

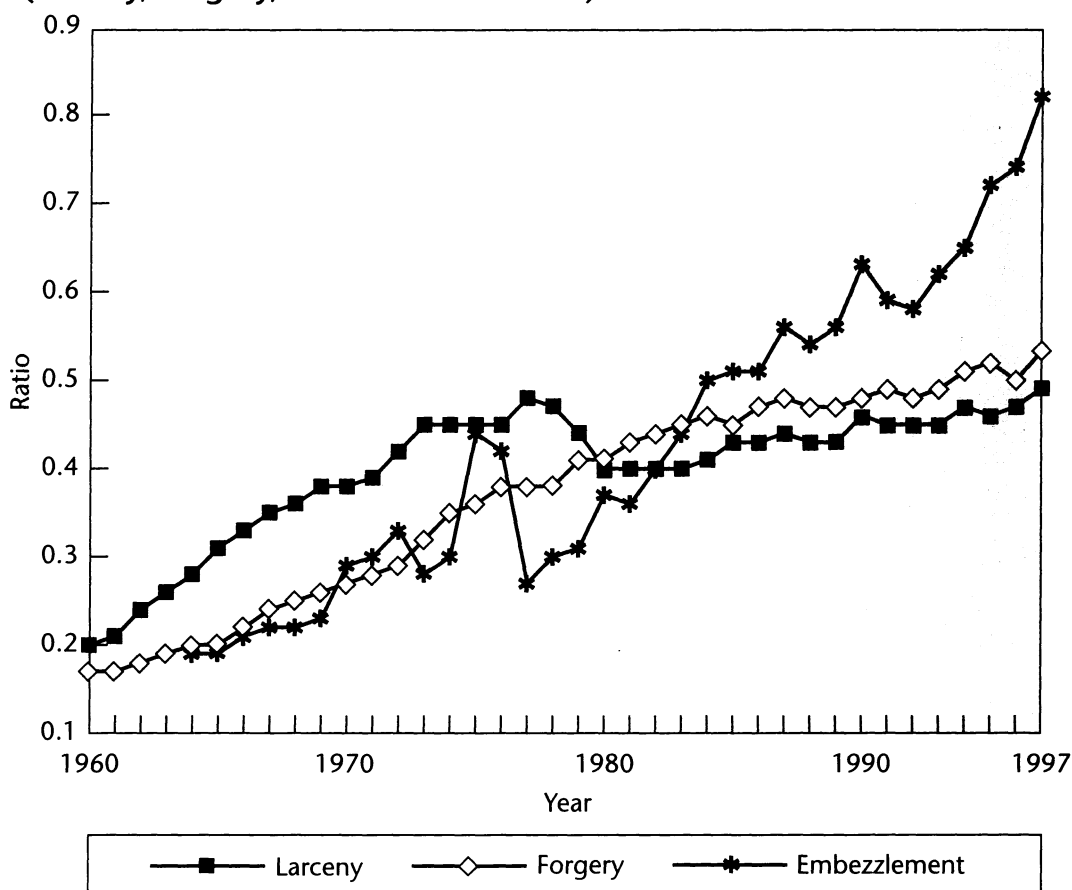


Note: Female contribution to crime is computed as $[100\{\text{female arrest rate}/(\text{female arrest rate}+\text{male arrest rate})\}]$ and is interpreted as percentage of all arrests of persons 18 and over accounted for by females over 18.

Source: Data are unpublished UCR arrest data for 12-month complete jurisdictions, obtained from the FBI.

The percentage of arrests for embezzlement accounted for by women shows a much more dramatic increase, jumping from 16 percent of all arrests for embezzlement in 1965 to an unprecedented 45.1 percent in 1997 (see exhibit 1). Again, this continues a long-term trend noted by other researchers for earlier portions of this series. The results of a Poisson regression demonstrate that the increase in the gender ratio of embezzlement between 1965 and 1997 is dramatic—278 percent ($p < 0.0001$). The increase from 1985 to 1995 alone is 40 percent ($p < 0.0001$). This occurs because, despite the fact that arrests of males for embezzlement declined between the late 1980s and 1995, arrests of females

Exhibit 4. Ratio of female to male arrests for property crimes (larceny, forgery, and embezzlement)



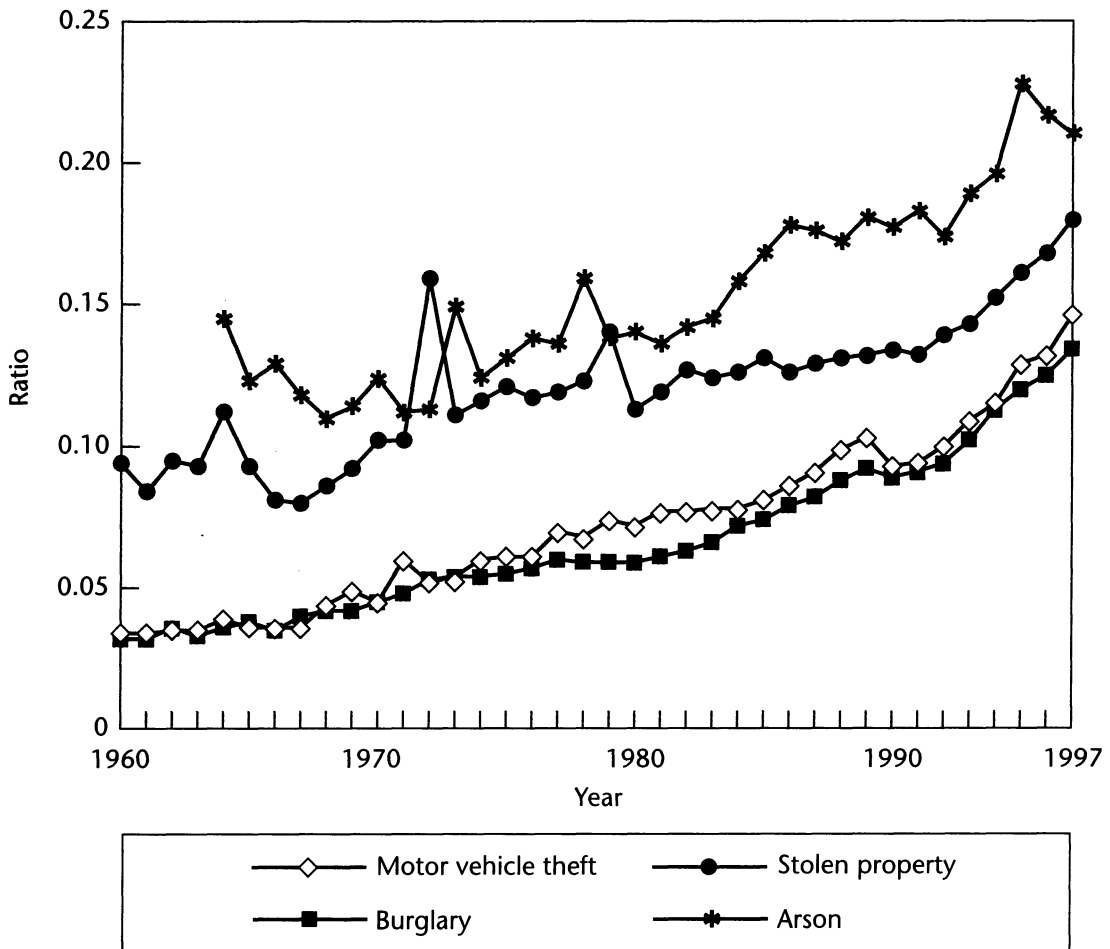
Note: Ratios are population-adjusted rates of female crime to population-adjusted rates of male crime for persons 18 years and older.

Source: Data are unpublished UCR arrest data for 12-month complete jurisdictions, obtained from the FBI.

increased. Nevertheless, one should keep in mind that this is a very low rate offense among both genders; in 1997, embezzlement arrest rates for women exceeded only the arrest rates for murder and arson, and for men, exceeded only the arrest rates for arson.

Exhibits 2 and 5 show that there are dramatic increases in the gender ratios of arrest for the more serious property crimes of burglary, motor vehicle theft, stolen property, and arson. In 1960, for example, women accounted for only 3 percent of arrests for burglaries; by 1997, women accounted for nearly

Exhibit 5. Ratio of female to male arrests for property crimes (motor vehicle theft, burglary, stolen property, and arson)

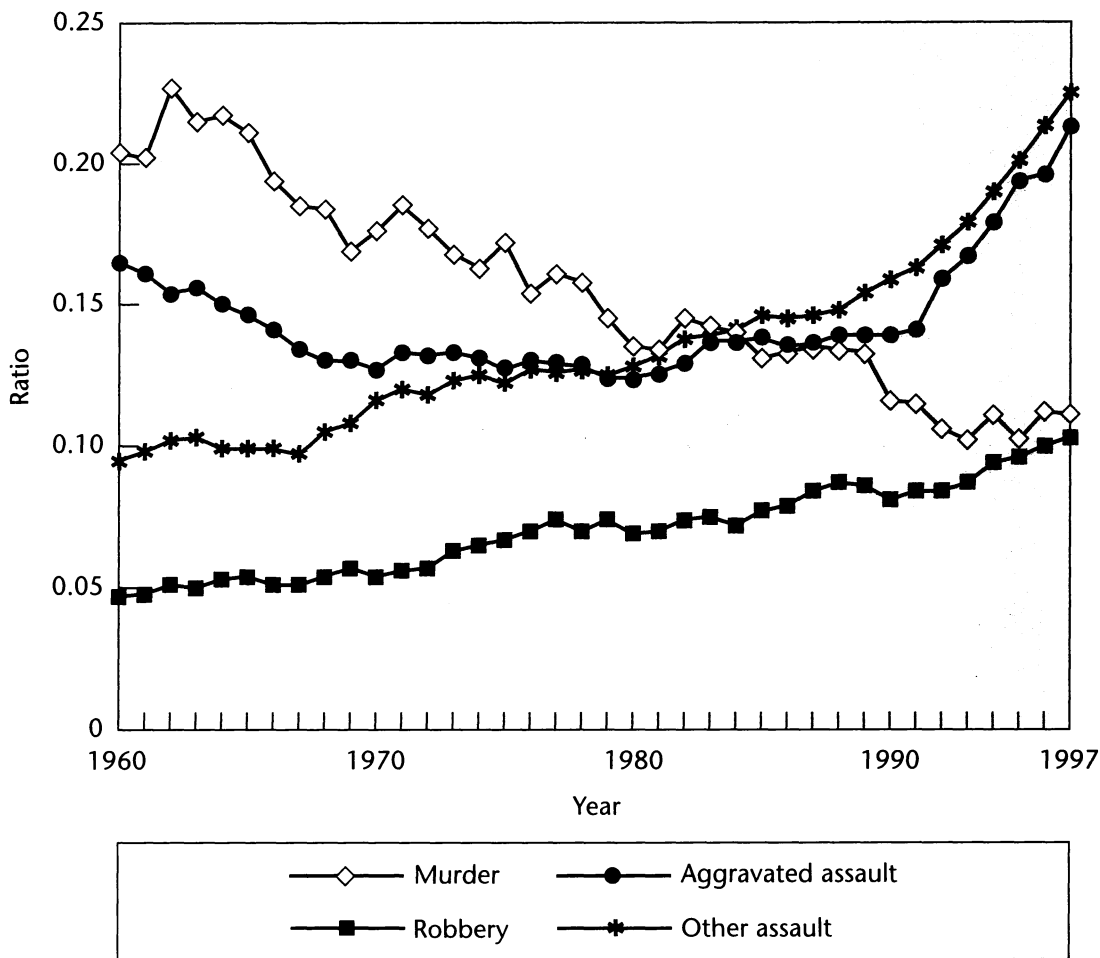


Note: Ratios are population-adjusted rates of female crime to population-adjusted rates of male crime for persons 18 years and older.

Source: Data are unpublished UCR arrest data for 12-month complete jurisdictions, obtained from the FBI.

12 percent of burglary arrests. Previous analyses of trends in the gender ratio have concluded that changes in these offenses were unimportant because they focused on only the earlier years in this series. A Poisson regression analysis shows that the increase in the gender ratio of burglary arrests was 218 percent (or a threefold increase) between 1965 and 1995; the increase from 1985 to 1995 alone was 63 percent (both $p < 0.0001$). A virtually identical situation exists for arrests for motor vehicle theft ($p < 0.0001$). A somewhat similar picture emerges for arrests for stolen property ($p < 0.0001$), although women account for a larger chunk of arrests for stolen property than for burglary or

Exhibit 6. Ratio of female to male arrests for violent crimes



Note: Ratios are population-adjusted rates of female crime to population-adjusted rates of male crime for persons 18 years and older.

Source: Data are unpublished UCR arrest data for 12-month complete jurisdictions, obtained from the FBI.

In sum, there has been statistically significant narrowing of the gender gap in arrests since 1960 for all of the offenses discussed here, with the exception of murder.

motor vehicle theft; there also is less change in the gender ratio of stolen property than the other two offenses during the three decades examined. For all three of these more serious property offenses, the recent jump in gender ratios occurs because there has been a modest decline in men's arrest rates and either a very slight or negligible decline in women's arrest rates. Again, the question here is why female offending has not declined similarly to male offending in recent years.

The gender ratio of arson—which is the least common offense among both males and females in 1997—shows an increase of 84 percent between 1965 and 1995 and a 35-percent increase from 1985 to 1995 (both $p < 0.0001$). Since 1985, both female and male rates of arson have declined, but the drop in male rates has been more pronounced.

Exhibits 3 and 6 show the changes in the percentage of arrests for violent crimes accounted for by females and the gender ratios of these offenses. Women accounted for fewer arrests for murders over time, because female murder rates declined even more rapidly than male murder rates in recent years. This trend thus is the reverse of all other trends in female-to-male arrest examined here. Arrests for other assault and robbery, by contrast, showed similar patterns to the property offenses, with constant upward trends since 1960 and greater increases from 1985 to 1995 (all $p < 0.0001$).⁵ By 1997, women accounted for nearly 18 percent of arrests for other assault and 9 percent of arrests for robbery. The increases in the gender ratios of arrests from 1965 to 1995 were 102 percent for other assault and 78 percent for robbery. The recent changes in the gender ratio for other assault occurred because there was a slight increase in female rates whereas male rates were fairly stable.⁶ Recent changes in the gender ratio for robbery occurred because female rates were declining more slowly than male rates.

Finally, the pattern for aggravated assault departs from that of other offenses. Exhibit 3 shows that the percentage of arrests for aggravated assault dropped slightly between 1960 (13.4 percent) and about 1980 (11 percent), climbed slowly until about 1991, and then began a dramatic increase through 1997, when women accounted for about 18 percent of the arrests for aggravated assault. The overall increase between 1965 and 1995 is 41 percent ($p < 0.0001$). The recent increase in the gender ratio of arrests for this offense occurs because the increases in female arrest rates were sharper than those in male rates between 1985 and 1995. The impact of these figures is magnified when one

considers that in 1997, aggravated assault was the third most common offense of those discussed here, among both females and males.

In sum, there has been statistically significant narrowing of the gender gap in arrests since 1960 for all of the offenses discussed here, with the exception of murder. Women now account for a nontrivial portion of most property and violent crimes.⁷ For many of these offenses, a substantial amount of change has occurred since 1985, a period that has not been studied fully to date. This recent change in the gender ratio has occurred, generally, because of a decline in male rates coupled with an increase, little change, or a smaller decline in female crime rates. Overall, these patterns raise two intriguing questions: First, what explains the narrowing gender gap in both property and violent crime? Second, why has the difference between the trends in female and male arrest rates become pronounced in recent years? In other words, if social conditions have triggered a decline in male crime rates, why have female rates not mirrored this decline? Answering these questions focuses attention on social conditions and processes that affect women's and men's crime differently (i.e., conditions that vary in their impact on crime across gender). The remainder of this article focuses on assessing possible answers to these questions.

Overall, these patterns raise two intriguing questions: First, what explains the narrowing gender gap in both property and violent crime? Second, why has the difference between the trends in female and male arrest rates become pronounced in recent years?

Explanations of Increases in Gender Ratios of Crime

Researchers studying the narrowing of the gender gap in crime have proposed three explanations—the liberation hypothesis, the economic marginalization hypothesis, and the decay of chivalry hypothesis. I address each of these in turn.

The liberation or emancipation hypothesis

The explanation of increases in female offending that has received the most attention in the literature is the liberation or emancipation hypothesis, which proposes that women's crime rates have increased with their increasing economic and social independence from men, thereby narrowing the gender gap in offending. The logic of this thesis can be traced back to the statements of early criminologists, such as Sutherland (1947, 100), who argued that the gender gap

in crime would be greatest in groups or countries in which the economic and social inequality between men and women is greatest. This general argument was first invoked to explain the reported narrowing of the gender gap in crime in the United States by Rita Simon (1975) and Freda Adler (1975). Specifically, Simon and Adler proposed that increases in female offending between the 1960s and 1970s could be attributed to the increasing liberation or emancipation of women that paralleled the women's movement of the 1960s. The two perspectives diverged, however, in locating the specific source of changes in women's crime. On the one hand, Adler argued that convergence in gender roles and attitudes led to a convergence in all types of crime, including violent and property crime. On the other hand, Simon proposed that the increasing labor force participation of women opened up new opportunities for crime (especially white-collar offenses) in the workplace.

Most empirical research, however, does not support the hypothesized link between the women's movement of the 1960s, women's emancipation, and the decreasing gender gap in crime. There are several major issues addressed in this research. The first is whether there is a link between the timing of the women's movement and changes in female crime. Steffensmeier (1978, 573) was the first to take up this issue following the publication of Adler's and Simon's books and showed that changes in female offending vis a vis male offending began prior to the late 1960s, before the time that the women's movement could be expected to have had an impact (for alternative findings, see Austin 1982).

A second issue in research on the emancipation thesis is whether changes in the patterning of certain crimes among females are consistent with the image of the "liberated" female offender. Specifically, Steffensmeier and his colleagues show that the largest increases in female arrests (from UCR) are for larceny-theft, fraud, and forgery; they argue that increases in these offenses are consistent with traditional gender roles and are inconsistent with Simon's version of the liberation hypothesis, that the mass movement of women into the paid labor force opened up opportunities to commit work-related crime (e.g., Steffensmeier 1978, 1980, 1993; Steffensmeier and Cobb 1981; Steffensmeier and Allan 1988, 1996; Steffensmeier and Streifel 1992). Steffensmeier and his associates argue that increases in larceny-theft are most likely due to increases in shoplifting, which is an offense associated with the traditional roles of women as family consumers and caretakers. Similarly, they argue that increases of fraud and forgery mostly are due to changes in writing bad checks, welfare fraud, and credit card fraud. Steffensmeier (1993) and Steffensmeier and Allan (1996) maintain that the most substantial changes in women's offending therefore probably reflect the proliferation of large shopping centers and increased opportunities to steal small portable goods, misuse credit cards, and write bad checks, all of which are consistent with

traditional female roles as family consumers rather than liberated roles of women in the paid-labor market. Consistent with this, Giordano, Kerbel, and Dudley (1981) report that their analysis of Toledo police blot- ters shows that the great majority of women arrested for embezzlement and fraud in the 1970s had passed bad checks rather than committed a work-related crime.

The argument that increases in women's crime are not due to increases in work-related offending is supported by some research on white-collar crime. Consistent with research on barriers to gender equality in labor markets, Box (1983, 181–182) argues that women's participation in work-related crime continues to be much lower than men's because the sex segregation of jobs offers women fewer opportunities to commit white-collar crime. Using data on sentenced white-collar offenders, Daly (1989) shows that sex segregation in the workplace does indeed restrict women's opportunities to commit serious white-collar crime. She reports, for example, that 90 percent of women convicted of bank embezzlement in her sample were in clerical jobs of some kind, and consequently, their offending tended to involve minor sums of money. Forty percent of men convicted of embezzlement were bank officers, by contrast, and thus their embezzlement involved larger sums of money. Moreover, whereas sex segregation in legitimate labor markets curbs women's opportunities to commit serious white-collar crime, corresponding sex segregation in illegitimate or criminal job markets similarly may restrict women's opportunities to participate in organized crime (e.g., Steffensmeier 1983; Campbell 1984; Alarid et al. 1996; Maher and Daly 1996).

Another issue raised in research on the liberation thesis concerns the statistical relationship between trends in female crime and indicators of women's emancipation. There are relatively few statistical time-series analyses of this relationship, and the findings of existing studies are somewhat inconsistent. Fox and Hartnagel (1979) use Canadian data from the 1930s through the 1960s and find that two indicators of women's emancipation—rates of female labor force participation and postsecondary degrees—significantly increase women's conviction rates for theft. They also report that women's fertility rates, which they treat as an indicator of involvement in traditional family roles, reduce female conviction rates over all crimes, as well as for theft. By contrast, Box and Hale (1983, 1984) find little evidence that comparable indicators of women's

Social movements, such as the women's movement, are the outcomes of social, political, and economic conditions; behavioral changes, such as changes in women's crime rates, may be related more directly to these underlying conditions than to the social movement itself.

emancipation significantly affected women's conviction rates in Britain from 1951 to 1980, once other variables are controlled (such as economic marginalization and criminal justice system variables). Steffensmeier and Streifel (1992) find that higher levels of female labor force participation reduced, rather than increased, the proportion of larcenies and embezzlements accounted for by women in the United States between 1960 and 1985. Overall, the evidence from existing time-series analyses does not lend much support to the thesis that increasing labor force participation among women per se is related to changes in gender ratios of crime.

The liberation thesis also has met with sharp criticism on theoretical grounds from feminist and critical scholars. One of the earliest criticisms is Carol Smart's (1976, 76; 1979, 58) argument that the notion that the women's movement has increased crime represents a "confused and simplistic understanding of the process of emancipation, its influence upon consciousness and social institutions, and its location within and alongside other social and historical developments" (see also Heidensohn 1985, 190–191). Smart explicitly says that working-class women have always worked, so if women's labor is increased by the movement, it is likely the labor of middle-class women in white-collar jobs, which would not explain increases in street crimes. Her work also can be interpreted as implying the following argument, although she does not state it explicitly: Social movements, such as the women's movement, are the outcomes of social, political, and economic conditions; behavioral changes, such as changes in women's crime rates, may be related more directly to these underlying conditions than to the social movement itself. Consequently, changes in female offending may be due to the forces of oppression and domination that gave rise to the women's movement, rather than emerging from the effects of the movement on women's relative emancipation. In other words, the relationship between women's offending and the equality gains due to the women's movement may be spurious. If both changing rates of women's crime and the women's movement itself are outcomes of experiences of women's economic, political, and social oppression, then the finding that female crime rates began increasing well before the onset of the women's movement makes sense.

Another critique targets Adler's liberal feminist argument that the convergence of gender roles led to a convergence in crime, including violence. Specifically, radical and socialist feminist scholars argue that gender must be viewed as the result of power relations and not simply the enactment of roles and formation of masculine or feminine attitudes (Daly and Chesney-Lind 1988, 511). From this perspective, patriarchy is the root source of gender differences in behavior, like crime; gender roles and attitudes are embedded within larger patriarchal structures, of course, but they cannot be adequately understood without reference to the larger structures of male dominance.

Finally, some researchers claim that the liberation hypothesis is undermined by empirical research that finds that the attitudes of convicted female criminals are not liberated (e.g., Steffensmeier and Allan 1996, 472). This is probably the least convincing of the critiques of the emancipation perspective. First, studies of gender roles, gender attitudes, and offending produce mixed findings, sometimes supporting an association between traditional gender attitudes and roles and offending (Shover et al. 1979; Simpson and Elis 1995; Heimer and De Coster 1999) and other times finding no consistent relationship (e.g., Horwitz and White 1987; Giordano and Cernkovich 1979; Widom 1979). This inconsistency likely reflects diversity in the definition and measurement of gender roles and gender attitudes (Heimer 1996); thus, a sweeping conclusion about the relationship between gender roles, attitudes, and law violation is not justified at this time. Second, even if this research did show consistently that gender roles and offending are unrelated, this would not constitute strong evidence against the liberation thesis. Strictly speaking, data on relationships between roles, attitudes, and crime among individuals cannot refute a hypothesis about aggregate levels of women's crime. As Lieberman (1985, 108) states, "[A]ssociations on the lower level are irrelevant for determining the validity of a proposition about processes operating on the higher level." Moreover, cross-sectional data on women's roles and behaviors cannot refute a hypothesis about change over time in women's rates of offending.

In sum, the liberation hypothesis has been subject to much criticism and has not been supported strongly by statistical analyses of changes in female crime over time. Most contemporary students of women's crime therefore argue that a more plausible explanation of change in female offending is change in the economic circumstances of women.

The economic marginalization hypothesis

The economic marginalization hypothesis proposes that the increased financial hardship of women relative to men in recent decades is a root cause of the narrowing of the gender gap in crime (e.g., Box 1983, 199; 1987, 43; Carlen 1988; Messerschmidt 1986; Miller 1986; Smart 1979; Steffensmeier 1980, 1993). As Box (1987, 42–43) argues, "[C]onventional crimes committed by females have increased considerably over the last decade in both the United Kingdom and the United States. The most plausible reason for this is that more women have become economically marginalised."⁸

As I mentioned at the beginning of this paper, the concept of economic marginalization is comparative in nature and refers to the economic disadvantage of women vis-a-vis men. Thus, the focus is on the *relative* economic situation of women as compared with men. This includes women's relative poverty, of

Single mothers, of course, felt the brunt of gender inequality in earnings and have had a difficult time supporting their families. This has produced a feminization of poverty in recent decades.

course, but also extends beyond this to include women's relative economic circumstances more generally. For example, if women were more likely than men to be working in low-paid jobs, with no other source of financial support, they would be marginalized economically compared with men on this dimension. Note, however, that some research focuses on a variant of the economic marginalization hypothesis and examines how changes in the absolute poverty rates of women are related to changes in women's crime and gender ratios of crime.

The hypothesis also emphasizes that economic circumstances and crime are dynamic processes, proposing that the gender gap in crime has narrowed over time as women's marginalization has increased.

As I noted in "Trends in Relative Crime Rates of Women and Men," gender ratios of arrests sometimes increase when female crime rates are not rising—the gender ratio of arrests can increase when female crime rates are stable or declining, provided that men's crime rates are dropping off more rapidly. Consequently, the economic marginalization thesis can address the question of why the female rates of some crimes have not dropped off as precipitously as the corresponding male rates, as well as the question of why female rates of other crimes have increased more than the male rates.

The economic marginalization hypothesis appears to be most closely linked to the anomie perspective on crime, although researchers rarely discuss its theoretical underpinnings. Women account for an increasing chunk of crime as economic inequality between women and other groups in society increases. This rationale is similar to the argument about inequality and violent crime rates proposed by Blau and Blau (1982). The implication for the individual level is that high levels of inequality—especially ascriptive inequality such as gender and race discrimination—create a sense of relative deprivation and engender frustration, and crime is a natural response.

There is another theoretical explanation of the economic marginalization hypothesis. Specifically, Messerschmidt (1986) offers a socialist feminist theoretical justification for the marginalization hypothesis in his book, *Capitalism, Patriarchy, and Crime*. He traces the root cause of the feminization of poverty and thus rising female crime to the emergence of the family wage system in the 19th century, which produced the separate spheres of paid labor by men and domestic labor by women. Applying Marxist feminist arguments, Messerschmidt argues that the emergence of the family wage was triggered in part by the needs of capitalism to

maintain a healthy labor force and to reproduce it in the next generation through the socialization of children. In addition, the family wage emerged as a mechanism to maintain patriarchy and male dominance across economic classes. After World War II, however, the family wage system began to erode and women moved into the labor market to supplement their husbands' earnings. But women's paid labor was viewed as secondary to men's labor, was undervalued, and was paid less. Single mothers, of course, felt the brunt of gender inequality in earnings and have had a difficult time supporting their families. This has produced a feminization of poverty in recent decades. Messerschmidt (1986, 87) concludes that this economic context is fertile breeding ground for increases in women's property crime, such as fraud and embezzlement.

Despite the lack of clear consensus among researchers about the theoretical underpinnings of the economic marginalization hypothesis, it is invoked quite regularly in contemporary studies of women's crime. For example, Chilton and Datesman (1987) speculate that their findings of race differences in the arrests of nonwhite women are due to the decline in the economic circumstances of young minority women in urban centers, even though they do not have access to data bearing directly on this claim. Moreover, recent reviews of research on trends in female crime by Steffensmeier (1993, 424–425) and Steffensmeier and Allan (1996) discuss poverty as a key factor driving the changes in women's offending.

Only a handful of empirical studies directly examine the relationship between the economic well-being of women and changes in gender ratios of crime, however. There are three studies in criminological journals that assess the relationships between indicators of women's economic marginalization and crime trends using multivariate statistical analyses. Box and Hale (1983, 1984), for example, report that the effects of women's rates of registering as unemployed had some influence on female conviction rates in England and Wales, for the period from 1951 to 1980. They note, however, that their indicator of economic marginalization may be problematic because many unemployed women did not register and the rate of registering may have changed during the period covered (Box and Hale 1984, 481). Steffensmeier and Streifel (1992) use U.S. data from 1965 to 1986 and, in each of their equations, operationalize women's economic marginalization in terms of *one* of the following indicators: the percentage of households that are female headed, the percentage of women who are unemployed, and the rate of births to single mothers. In separate analyses (each holding constant variables related to women's emancipation), they find the following patterns: changes in the percentage of female-headed households are significantly related to changes in female contributions to arrests for burglary and prostitution, changes in women's unemployment rates are related to trends in female contributions to arrests for larceny and prostitution, and changes in

rates of births to single mothers are related to changes in female contribution to arrests for larceny. As the authors acknowledge, however, their sample size is small ($N=26$). This precludes them from including multiple measures of women's economic well-being in a single equation. In addition, it is possible that relationships that are significant in the population are found to be non-significant in the analyses of their sample data.

The studies of Box and Hale and of Steffensmeier and Streifel are important because they represent the first attempts to test the economic marginalization hypothesis using time-series data and multivariate data analysis. Yet, they do not provide definitive answers regarding the status of the hypothesis. First, many of the variables intended to capture economic marginalization measure the absolute poverty of women, rather than their economic well-being as compared with the economic well-being of men. For example, the percentage of women unemployed does not give information about levels of male unemployment and thus captures absolute rather than relative economic status. The analyses of these variables, therefore, provide a test of a variant of the hypothesis but do not assess the prediction about the role of comparative well-being. Second, these studies include only one measure of women's economic well-being in each of their equations (due to restraints imposed by sample sizes). Neither the percentage of women unemployed nor the percentage of female-headed households alone captures the complexity of women's economic marginalization, as I illustrate later in this article.

In sum, the economic marginalization hypothesis offers a plausible explanation for the narrowing of the gender gap in crime over recent decades. The three studies that have tested the hypothesis directly have produced some support. However, more research is needed to understand the precise mechanisms linking changes in the relative economic well-being of women and men with changes in the gender ratio of crime. In the remainder of this article, I take the first step in uncovering these mechanisms.

Changing criminal justice practices: The decay-of-chivalry hypothesis

Most researchers suggest that at least some of the change in the relative arrest rates of women and men reflects changing criminal justice practices. Specifically, with changing gender roles and attitudes over the past few decades, law enforcement may have become less "chivalrous" and thus more likely to arrest women than it was in the past (see Steffensmeier 1993). Indirect support for this argument comes from analyses of British data that find that official measures of female crime are influenced by the changing sex composition of the police force between 1950 and 1981 (Box and Hale 1983, 1984)

and from an analysis of U.S. data that reports that gender ratios in offending are influenced statistically by increases in numbers of police officers per capita between 1965 and 1986 (Steffensmeier and Streifel 1992).⁹

Yet, given the available data to date, there are at least three reasons to be cautious in interpreting these findings as demonstrating that criminal justice bias substantially affects changes in gender ratios of arrests. (See also arguments by Chesney-Lind [1989, 1997] that females are treated more punitively than males in the justice system.¹⁰) First, the measures used in existing studies to tap changing gender bias in criminal justice practices are indirect; they essentially tap changes in numbers and gender composition of criminal justice personnel, not in the attitudes or behavior of personnel. Of course, obtaining direct measures in macro-level research would be extremely difficult, if not impossible.

Second, and more important, the argument that police have become more “liberated” and thus less likely to treat female offenders “chivalrously” by letting them off the hook does not comport well with the actual patterns of women’s arrests over the past decade or so. Recall that exhibits 1 through 6 showed sharper increases in female relative to male arrests for many offenses in the 1990s than in the 1970s or 1980s. Explaining this pattern would seem to require a more dramatic metamorphosis in the gender attitudes and behavior of police in the 1990s than in previous years. It seems unlikely that such an abrupt shift occurred. Moreover, a straightforward decay of chivalry hypothesis would predict increasing rates of female arrests, rather than the slight declines or stability that occurred in arrest rates for many offenses since 1990 (described previously in “Trends in Relative Crime Rates of Women and Men”). Stated more generally, the decay-of-chivalry hypothesis has trouble explaining fairly rapid changes in female arrest rates (whether upward or downward). Indeed, attitude-behavior research in social science has shown that group attitudes typically do not shift as quickly as the decay of chivalry hypothesis would require to explain changes in arrest patterns.

Third, as I discussed earlier in “Trends in Relative Crime Rates of Women and Men,” Hindelang (1981) finds similar gender ratios in his careful comparison of UCR data with reports on the gender of offenders in the National Crime Victimization Survey. If chivalry leads to less likelihood of arresting female compared with male suspects, then the gender ratios in the UCR data should depart from the gender ratios calculated using victims’ reports, counter to Hindelang’s findings. Furthermore, it seems likely that at least some of the Part I Index offenses of UCR—such as aggravated assault, robbery, and arson—are serious enough crimes that police officers would be likely to arrest suspects, regardless of gender.

The evidence that decreasing gender bias in arrests accounts for a substantial portion of the increase over time in the proportion of arrests accounted for by females therefore is not overwhelming. However, we cannot rule out completely the decay of chivalry as a factor in analyzing changing patterns of gender ratios of offending. The most judicious conclusion, at present, is that changing gender attitudes and behaviors of police may have some effect on changing gender ratios of arrests, but this does not explain the bulk of the change in the relative offending of females and males.

Indeed, this position is supported by the three empirical analyses of criminal justice bias discussed previously, which all report independent significant effects of women's economic marginalization on the gender gap in offending *after* measures of changing criminal justice personnel are controlled (Box and Hale 1983, 1984; Steffensmeier and Streifel 1992). Consequently, there remains good reason to think that the economic marginalization of women contributes to changes in the gender ratio of crime. The following sections of this article delve further into the economic marginalization argument, further assessing its potential validity and suggesting avenues for extending the theoretical argument.

Studies of Women's Poverty and Crime

The economic marginalization of women is a complex phenomenon. Understanding the phenomenon and its relationship to crime requires consideration of the full complement of structural factors that cumulate to increasingly disadvantage women economically, relative to men. In addition, although the economic marginalization hypothesis focuses primarily on aggregate relationships, it would be useful to understand how the structural conditions leading to women's relative disadvantage are translated into crime through group- and individual-level mechanisms. This section draws on descriptive studies of adult women offenders and on qualitative and ethnographic studies of women's crime and poverty to move toward meeting these goals.

Most of the studies reviewed in this section focus on individuals, many rely on cross-sectional data, most do not examine poverty among noncriminal women, and most do not include comparisons with males (exceptions are Daly 1994 and Steffensmeier and Haynie forthcoming). They therefore cannot speak directly to the question of whether changes in the gender ratio of crime are associated with changes in the economic marginalization of women in the United States. Nevertheless, these studies offer key insights that can be used to push forward research on the relative economic well-being of women and crime, a point to which I return at the end of this article in "Toward a More Complete Explanation of Changes in Gender Ratios of Crime."

The structural correlates of women's economic disadvantage

As researchers have noted (e.g., Steffensmeier 1993), descriptive studies of women offenders are consistent with the general thrust of the economic marginalization hypothesis because they reveal that most women who enter the criminal justice system are disadvantaged socioeconomically. In addition, these studies offer insights about the specific aspects of economic disadvantage that may be consequential for women's crime. For example, Wolfe, Cullen, and Cullen (1984) analyzed the police records of a medium-sized Southern city for the years from 1969 to 1975 and report that in their sample of 2,507 arrests of women, the typical offender was younger than would be expected given the age distribution of women in the city. She was also African-American and single and had less than a high school education. Only one in four of the offenders was described as unemployed; but, nearly all of those who were employed were unskilled workers (487).

Similarly, Giordano, Kerbel, and Dudley (1981) report that their analysis of police blotters in Toledo from 1890 through 1976 depict the typical female offender in the 1970s as a single, unemployed minority. Furthermore, although the data are incomplete, there is some indication of change over time in the description of the archetypal woman arrestee: From 1890 onward, arrested women were more apt to be nonwhite. Since 1950, arrested women became less likely to be married—57 percent were unmarried in 1950 and 79 percent were unmarried in 1976. (Although statistics for the general population are not provided, these numbers certainly would exceed those figures.)

Steffensmeier and Haynie (forthcoming) go beyond the research on women offenders to show that several key indicators of structural disadvantage influence female crime rates in a sample of U.S. cities. Specifically, they show that rates of overall poverty, income inequality, unemployment, female-headed households, and the racial composition of cities (collapsed across gender) are associated with female crime rates as well as male crime rates.

Recent ethnographic and qualitative research on women's crime focuses attention on some of the same structural factors. For example, a similar portrait of female criminals emerges in Miller's (1986) study of women street hustlers in Milwaukee (see also Romenesko and Miller 1989), Daly's (1994) research on women felons in New Haven, Maher's (1997) ethnography of women crack cocaine users and sex workers in Brooklyn, Baskin and Sommers' (1998) study of serious and violent female offenders in New York, Campbell's (1984) research on girl gangs in New York, and Carlen's (1988) research on a sample of female criminals in Great Britain. Specifically, these studies emphasize that

most of the women in their research are unmarried and economically marginalized, with limited education and periods of unemployment interspersed with periods of work in low-paying service-sector jobs. For example, Romenesko and Miller (1989) note that the previous jobs of the women in their sample included work as cooks, housekeepers, store clerks, waitresses, and go-go dancers. Baskin and Sommers (1998, 80) report that of the women offenders in their sample who were employed, most worked in unskilled jobs as factory workers, salespersons, and office clerks. Daly (1994, 44) observes that at the time of arrest, only 8 of the 40 women that she studied were working in legitimate jobs, 16 were receiving welfare benefits, and the remaining 16 had "no clear means of economic support."

Overall, these studies suggest that the dimensions of women's economic circumstances that are associated with female offending are those factors that often are identified as correlates in studies of aggregate crime rates and male offending (e.g., Bursik and Grasmick 1993), namely age, race, family disruption, unemployment, and employment in marginal or low-paying jobs.

Mechanisms linking women's economic disadvantage and crime

Qualitative and ethnographic studies of women's poverty and crime take us beyond these demographic relationships, to illuminate some potential group- and individual-level mechanisms through which structural aspects of poverty may translate into crime. As in research on crime and delinquency, more generally, these studies focus on neighborhood context, family processes, deviant networks, attitudes, motives, and decisionmaking processes. The specific emphases within these general foci sometimes converge with and sometimes depart from the emphases in other criminological research.

There is a good deal of convergence, for example, between the ways that neighborhood context is addressed in research on poor women's crime and in other research in criminology. Nearly all of the women discussed in the ethnographic literature on women's poverty and crime find themselves living in disadvantaged, disorganized, and deteriorating communities with high rates of drug use, property crime, and violence (e.g., Miller 1986; Baskin, Sommers, and Fagan 1993; Baskin and Sommers 1998). These women tend to be isolated socially as well as economically from mainstream society, paralleling research on aggregate crime rates and male offending (e.g., Shihadeh and Flynn 1996).

There are important points of departure, as well as convergence, in the treatment of family process in other criminological research and studies of women's crime. As in other research on crime, many of the recent studies of women's

crime focus on the events and circumstances that women experienced in their families of origin during childhood. For example, several recent studies report that economically marginalized women offenders often experienced fairly extreme poverty in their families of origin, which disadvantaged them in terms of legitimate avenues and thus contributed to their entry into crime during adulthood (Miller 1986; Carlen 1988; Romenesko and Miller 1989; Daly 1994). Studies of women's crime, however, depart significantly from most other studies of crime by strongly emphasizing the importance of victimization and abuse during childhood. Daly (1994) and Maher (1997), for example, both note that about one-third of the women in their studies experienced physical and/or sexual abuse as children (see also Chesney-Lind and Shelden 1998). Daly, in fact, identifies a subgroup of female felons that she labels "harmed and harming women," who experienced abuse as children in addition to economic hardships. Daly invokes a quasi-psychological argument, maintaining that as these abused girls grew up, they became increasingly violent and committed violent crime when they were not able to contain their rage. According to Daly, these women reproduce their experiences with abuse by acting violently toward others.

Research on women's crime, like other recent studies of crime, also stresses the role of peer processes linking structural disadvantage with offending, especially processes of recruitment into deviant and criminal networks. Specifically, several recent studies suggest that women who live in marginalized communities are more likely to encounter and become incorporated into criminal and deviant networks, which play a major role in initiating them into crime and in sustaining their criminal involvements in the future (Miller 1986; Carlen 1988, 36–38; Romenesko and Miller 1989; Baskin, Sommers, and Fagan 1993). Through these networks, women can be recruited directly into street hustling, or they may get involved in drug use through deviant networks, which then leads to more extensive involvement in criminal networks and crime to support their habits (e.g., Miller 1986; Baskin and Sommers 1998). Furthermore, recruitment into these networks at times occurs within the family, with immediate or extended family serving as the conduit between young women and criminal groups (Miller 1986).

Arguments about criminal attitudes and motives in the literature on women's poverty and crime parallel arguments from other research on crime, by arguing that persons living in disadvantaged structural conditions are more likely to learn definitions (attitudes, motives, etc.) that favor using crime and violence to solve problems. However, research on women's crime has added an important twist on this basic argument, asserting that the meaning of violence may differ across gender. Women may engage more often in violence as a protective

mechanism—in an attempt to counter current victimization by others or ward off potential victimization in the future—whereas men may be more likely to use violence to “do gender” (e.g., Daly 1994; Joe and Chesney-Lind 1995; Maher 1997; see also Messerschmidt 1993). For example, Maher (1997) argues that the women sex workers in her study rob their clients as a way to build reputations for violence, which helps them to divert potential victimization. This argument suggests that the exposure to high levels of violence and potential victimization that typify impoverished neighborhoods may lead women to define violence as a way to protect themselves.¹¹ The same process may occur among men, of course, as Anderson (1999) argues. But, the implication of studies of women's offending is that the relationship may be more pronounced among women.

Finally, as in the criminological literature more generally, some studies of women's poverty and crime describe a fairly rational decisionmaking process leading to offending—marginalized women who are confronted with bleak prospects in legitimate labor markets decide to turn to illegitimate opportunities. Carlen (1988, 32) argues that most of the crimes committed by the women in her sample were property offenses, often occurring when women on the economic margins saw crimes like shoplifting and check fraud “as the best method of solving their financial problems and gaining some control over their lives.” Romenesko and Miller (1989, 110) maintain that many of the hustlers they studied saw street crimes as alternative work opportunities that allowed them to feel “productive as women workers.” Baskin and Sommers (1998, 145) describe the decisionmaking process leading to violence among their sample of offenders as reflecting the “women's experiences and understandings of their immediate environments” within the constraints imposed by structural disadvantage and community decay.

Other research on women's crime indicates that these choices may often be fueled by the desire to take care of others, including children. The decision to pursue illegal avenues to income when legal avenues are blocked appears to be exacerbated when offenders are mothers, especially single mothers. Miller (1986, 85) notes that street hustling—which includes prostitution, theft, check forgery, burglary, robbery, and other crimes—is a strategy used by the women in her sample to support their children, as well as themselves. Carlen (1988, 115) notes that having children increases the poverty of unmarried female offenders and leads many to resort to crime to provide food, clothing, and other things for their youngsters. Another study finds that the need to take care of children and others is the primary rationalization for crime given by a sample of women imprisoned for fraud and embezzlement (Zietz 1981). Similarly, a study of offenders convicted of white-collar crimes like embezzlement, postal fraud, credit card fraud, and false claims reports that women were more likely

than men to say that their crimes were motivated by their families' financial need (Daly 1989).

In short, like other studies of crime, recent ethnographic research on women's crime demonstrates that crime is a matter of choice and emphasizes that choices often are constrained by structural circumstances. Unlike men, however, women who decide to commit crime may be more influenced by concern with taking care of families and others. Moreover, at least one feminist study argues that some women actively resist and rebel against structural constraints and the authority structures that attempt to control poor, marginalized women, such as welfare and criminal justice agencies (Carlen 1988). But, because these women are so powerless in the larger social structure, their resistance often results in the loss of services, further regulation, and increased sanctions. This can become part of a downward spiral in which women's extreme poverty and criminal involvement are exacerbated.

I will return to address these group- and individual-level mechanisms linking structural disadvantage with women's crime in "Toward a More Complete Explanation of Changes in Gender Ratios of Crime," where I suggest avenues for further development of the marginalization thesis. Now, however, I turn attention to assessing the key questions of whether the economic marginalization of women has increased substantially over recent decades, and whether the changes seem to parallel increases in the proportion of crimes committed by women.

Trends in the Economic Marginalization of Women and the Gender Ratio of Crime

Studies of poverty and women's economic well-being in the United States since 1960 suggest that three sets of factors have coalesced to produce increasing economic marginalization of women as compared with men.¹² First, there have been dramatic changes in the composition of the family. Second, there has been persistent wage inequality across gender (i.e., women's wages have not been on par with men's wages), as well as increasing inequality or dispersion in income among women and men. Third, the welfare "safety net" has eroded consistently over recent decades. Any of these trends alone probably would not have resulted in the increases in the economic marginalization of women that has occurred in the United States; it is their *combined impact* that is crucial.

Existing tests of the economic marginalization hypothesis, however, have included in each of their statistical equations only a *single* factor relating to women's poverty and relative economic well-being. In this section, I present a

more detailed analysis of the way that multiple demographic and economic factors may combine to influence trends in women's offending. This level of detail is important because isolated factors that are only weakly or moderately related to women's crime may operate in tandem with other factors to have a much greater impact. Indeed, this section demonstrates that the relationship between women's economic marginalization and crime cannot be understood without acknowledging the complex interplay among various social structural factors.

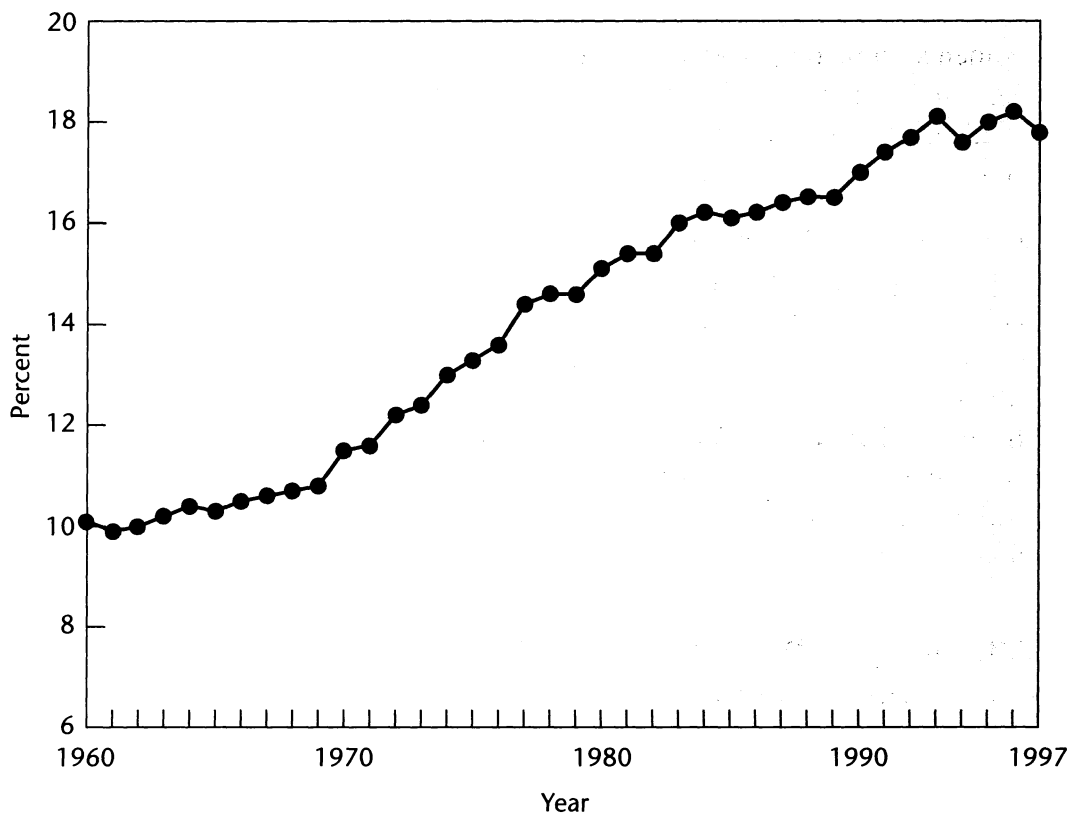
Toward this end, I discuss major findings from the demographic and economic literatures regarding three categories of structural-level processes that have combined to create greater economic hardship among women than men. These categories are changes in family composition, inequality in earnings, and the decay of welfare. I then show how the combination of multiple factors can be linked to changes in the gender ratio of arrests. The parallels drawn here between specific aspects of women's economic marginalization and crime resonate well with the findings discussed above from ethnographic and qualitative studies of women offenders.

Changing family composition, women's poverty, and women's crime

The American family has experienced dramatic changes over the course of the 20th century. Compared with the earlier parts of the century, more people are divorced, more children are born to single mothers, and more married women work in the paid labor force (Sweet and Bumpass 1987; Wetzel 1990).¹³ These shifts reflect two important patterns of change in families (see McLanahan and Casper 1995): There has been a substantial increase in dual-earner families, with both men and women working in the paid labor force. At the same time, the number of female-headed households has exploded, reflecting increases in divorce and births out of marriage, as well as a recent trend toward delaying marriage (see Wetzel 1990). Exhibit 7 shows that whereas female-headed households accounted for only 10 percent of all households in 1960, they made up almost 18 percent of households in 1997, with the greatest growth occurring during the 1970s (U.S. Bureau of the Census 1998c, table C-3). This growth in female-headed households has exceeded the growth of all other household patterns in the United States (Rodgers 1996).

The increasing numbers of dual-earner and female-headed families combine with changes in the relative income levels of these families to produce increasing economic inequality across households in the United States. Consider that the median income of dual-earner families was \$34,393 in 1960 and \$60,669 in 1997 (in 1997 dollars). Female-headed families had median incomes of \$14,794 in 1960 and \$21,023 in 1997 (U.S. Bureau of the Census 1998a).

Exhibit 7. Female-headed households as a percentage of all households



Note: Prior to 1979, unrelated subfamilies are included in all households. Beginning in 1979, unrelated subfamilies are excluded.

Source: U.S. Bureau of the Census 1998c.

Hence, although dual-earner families increased their income by roughly 76 percent, female-headed families increased their income by only 42 percent since 1960. This shift in relative income combines with the increasing numbers of dual-earner and female-headed families to increase economic inequality across family types (Karoly 1993).

The picture becomes a bit more complex when we shift the focus from income inequality to relative poverty across household types. Although the poverty rates of all types of households declined during the 1960s, the decline was more gradual among female-headed households than among all household types combined; thus the gap between the poverty rates of female-headed households and other households widened during this period (see exhibit 8; U.S. Bureau of the Census 1998c, table C-3; also Bane 1986).¹⁴ Whereas the

Exhibit 8. Poverty rates of female-headed households and all households combined

	Poverty rate of female-headed households (percent)	Absolute poverty rate of all households	Relative poverty rate of female-headed households*
1960	42.4	18.1	2.3
1961	42.1	18.1	2.3
1962	42.9	17.2	2.5
1963	40.4	15.9	2.5
1964	36.4	15.0	2.4
1965	38.4	13.9	2.8
1966	33.1	11.8	2.8
1967	33.3	11.4	2.9
1968	32.3	10.0	3.2
1969	32.7	9.7	3.4
1970	32.5	10.1	3.2
1971	33.9	10.0	3.4
1972	32.7	9.3	3.5
1973	32.2	8.8	3.7
1974	32.1	8.8	3.6
1975	32.5	9.7	3.4
1976	33.0	9.4	3.5
1977	31.7	9.3	3.4
1978	31.4	9.1	3.5
1979	30.4	9.2	3.3
1980	32.7	10.3	3.2
1981	34.6	11.2	3.1
1982	36.3	12.2	3.0
1983	36.0	12.3	2.9
1984	34.5	11.6	2.8
1985	34.0	11.4	3.0
1986	34.6	10.9	3.2
1987	34.2	10.7	3.2
1988	33.4	10.4	3.2
1989	32.2	10.3	3.1
1990	33.4	10.7	3.1
1991	35.6	11.5	3.1
1992	35.4	11.9	3.0
1993	35.6	12.3	2.9
1994	34.6	11.6	3.0
1995	32.4	10.8	3.0
1996	32.6	11.0	3.0
1997	31.6	10.3	3.1

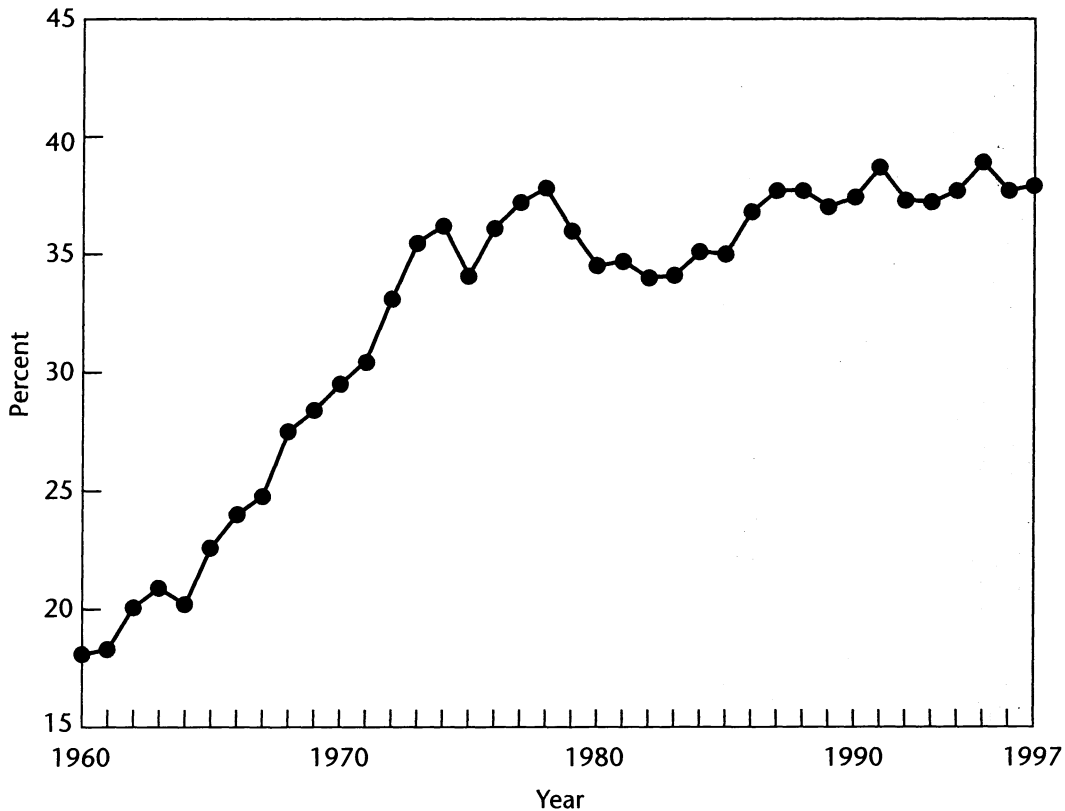
* Computed as absolute poverty rate of female-headed households/absolute poverty rate of all households.

Note: Prior to 1979, unrelated subfamilies are included in all households. Beginning in 1979, unrelated subfamilies are excluded.

Source: U.S. Bureau of the Census 1998c.

1960 poverty rate of female-headed households (42.4 percent) was more than double the poverty rate for all households combined (18.1 percent), the 1970 poverty rate of female-headed households (32.5 percent) was more than triple the poverty rate of all households (10.1 percent). As exhibit 8 shows, the absolute poverty rates of all households combined reached a low in 1973 and 1974, whereas the absolute poverty rates of female-headed households did not change much between the late 1960s and middle 1970s. The *relative* poverty of female-headed households can be defined as the absolute poverty rates of female-headed households divided by the absolute poverty rates of all households. Viewed in this way, the relative poverty of female-headed households increased from 1960 through the middle 1970s, peaking at 3.7 times the poverty rate of all households combined in 1973. Since that time, the relative poverty of female-headed households has remained fairly stable, hovering around three

Exhibit 9. Percentage of the poor population residing in female-headed families



Note: Prior to 1979, unrelated subfamilies are included in all households. Beginning in 1979, unrelated subfamilies are excluded.

Source: U.S. Bureau of the Census 1998c.

When the stable (but substantial) relative poverty of female-headed households is combined with the increasing prevalence of female-headed households, the outcome is an increasing percentage of the total poor population in the United States residing in families headed by a single woman.

times the poverty rate of all households. Female-headed households are clearly disadvantaged economically compared with other households. A more refined breakdown of household types reveals this relative disadvantage in greater detail: In 1997, the poverty rate for female-headed households was six times greater (31.6 percent) than the rate for married couples (5.2 percent), and more than double the rate for male-headed households with no wife present (13 percent) (U.S. Bureau of the Census 1998c, table C-3).

Because the relative poverty of female-headed households has been rather stable since the middle 1970s, this fact alone cannot explain the increasing economic disadvantage of women. However, when the stable (but substantial) relative poverty of female-headed households is combined with the increasing prevalence of female-headed households noted previously, the outcome is an increasing percentage of the total poor population in the United States residing in families headed by a single woman.¹⁵ This is the phenomenon typically referred to as the feminization of

poverty in the demographic and economic literatures (e.g., Pearce 1978; Bane 1986; Garfinkel and McLanahan 1986; Rodgers 1996). Exhibit 9 shows that the percentage of the poor population residing in female-headed families increased from 18.2 percent in 1960, to 29.5 percent in 1970, to 34.6 percent in 1980, to 37.5 percent in 1990, to 37.9 percent in 1997 (U.S. Bureau of the Census 1998c, table C-1).¹⁶ The most dramatic increase occurred between 1960 and the late 1970s, and there was a brief decline during the recession of the early 1980s (when persons from other households joined those from female-headed households among the ranks of the poor). During the late 1980s, the percentage of the poor population living in female-headed families increased again, reaching a new high in 1991. Since then, the figure has fluctuated and not shown a clear upward trend. Because both the prevalence (45.6 percent of African-American households and 17 percent of white households in 1997) and poverty rates of female-headed households are more pronounced among African-Americans than among whites (39.8 percent and 27.7 percent, respectively, in 1997), economic marginalization is especially acute among African-American women (U.S. Bureau of the Census 1998c, table C-1). As this discussion makes clear, an analysis of the relationship between the increasing economic marginalization of women and female crime must take into account changes in the percentage of

the poor population residing in female-headed families or the relative poverty rate of female-headed households.

A comparison of the trend in the percentage of the poor in female-headed families (exhibit 9) with the trends in the proportion of arrests accounted for by females (exhibits 1 through 3) indicates a substantial association. Specifically, as the percentage of the poor living in female-headed families increases, women account for more of the arrests for forgery, larceny, embezzlement, auto theft, stolen property, burglary, arson, robbery, and other assault. For example, the steep increase in the percentage of the poor population living in female-headed families between 1960 and the late 1970s is associated with an increase in the proportion of robberies and other assaults accounted for by women (compare exhibits 3 and 9). Women's contributions to arrests for larceny, forgery, and embezzlement also increased substantially between 1960 and the late 1970s (exhibit 1). Women's contributions to arrests for burglary and motor vehicle theft climbed during this period, too, albeit more slowly (exhibit 2). Yet, female-relative-to-male arrests for several offenses—particularly more serious property and violent crime (e.g., burglary, stolen property, motor vehicle theft, aggravated assault, other assault, robbery)—continued to escalate through the 1980s and into the 1990s, even though the proportion of the poor population living in female-headed families increased much more slowly during this period than during the previous two decades. This finding suggests that factors other than simply the relative poverty of women may be at work. I discuss trends in other potential structural variables tapping women's economic marginalization later in this paper. First, however, a brief note about the potential causes of increases in female-headed households is in order.

A note about sources of change in family composition

Given that the feminization of poverty is attributed partially to great increases in the prevalence of female-headed households, it is logical to ask why these increases have occurred. Demographic and economic research examines three hypotheses about the causes of these increases. The first hypothesis emphasizes the fact that rates of female-headship have become especially high among African-Americans. This hypothesis, suggested by Wilson (1987), states that there has been an increasing shortage of marriageable African-American men, due largely to their high rates of unemployment and marginal income levels. There have been numerous tests of this hypothesis. Although most recent studies find some support for this argument, they also concur that declines in the earnings and employment of African-American men explain only a small portion of the decrease in African-American marriage rates (e.g., Mare and Winship 1991; Lichter, LeClere, and McLaughlin 1991; Lichter et al. 1992; Wood 1995).

Because an increasing percentage of women are the sole breadwinners for themselves and their children (as opposed to living in male-headed and dual-earner households), gender inequality in wages means that these women are worse off economically than single men and couples. Averaging across all women, this results in increasing economic marginalization of women as compared with men.

The second hypothesis is that increasing female employment has led to economic independence, and, thus, women have become less motivated to marry (e.g., Becker 1981; Espenshade 1985). Although some studies support this hypothesis (McLanahan and Casper 1995; Schultz 1994), an accumulating body of research calls the prediction into question (for a review, see Oppenheimer 1997). Contrary to the hypothesis, research finds that poor women are less likely than nonpoor women to marry (Lichter et al. 1992; McLaughlin and Lichter 1997) and that declines in marriage have been most pronounced among the least educated women (Qian and Preston 1993).

The third hypothesis proposed to explain increases in female-headed households is that welfare has created economic dependency and disincentives to marriage among low-income groups (Murray 1993). Again, the weight of the evidence does not strongly support this hypothesis (see Moffitt 1992). The trend toward increasing female-headship has continued even as real welfare benefits have declined (e.g., Garfinkel and McLanahan 1986; Moffitt 1992), and multivariate studies show that the effects of welfare benefits on female-headship are generally small or negligible, and insufficient to account for the dramatic increases in female-headed households (e.g., Ellwood and

Bane 1985; Moffitt 1994; Schultz 1994; Lichter, McLaughlin, and Ribar 1997).

In sum, although hypotheses regarding the shortage of marriageable men and welfare disincentives receive some empirical support, neither of these factors appear to account for much of the increase in the rate of female-headed households over the past few decades. Indeed, most of the shift in the prevalence of female-headed households in the United States remains "unexplained" (Mare and Winship 1991).

Wage inequality, restricted economic opportunities, and women's crime

The above review highlights the facts that there has been a great increase in the prevalence of female-headed households over the past four decades, and an increasing proportion of the total poor population in the United States has been

residing in female-headed families. Yet, the trends in these variables cannot by themselves account for the patterns in gender ratios of crime depicted in exhibits 4 through 6. Moreover, as I noted earlier, the increasing economic marginalization of women encompasses more than increasing poverty. It refers to a decline in the economic situation of women as compared with men, more generally. If, over a period of time, women became increasingly unstable financially as compared with men, they would be increasingly marginalized economically—whether or not the poverty levels of the two groups changed. Consequently, we must examine social structural factors other than poverty levels to assess more fully the economic marginalization hypothesis of crime; we also must examine factors such as economic opportunity structures and wage inequality and consider how these combine with the changing composition of the family to produce inequality across gender in economic well-being.

A first consideration is inequality across gender in wages, or what is called the gender gap in wages. Women's wages historically have been lower than men's wages for comparable work (Goldin 1990). This phenomenon persists today: In 1997, women working full-time still only earned an average of 74.2 cents for every dollar earned by men (U.S. Bureau of the Census 1998a).¹⁷ Sex segregation of occupations and the devaluation of women's work appears to account for a sizable chunk of the gender gap in wages (see Treiman and Hartmann 1981; Bergmann 1986; Tomaskovic-Devey 1993).¹⁸ Women are vastly more likely than men to work in clerical and administrative support positions, domestic labor, and other service occupations; women are unlikely to work in skilled craft, precision production, and transportation jobs (Bianchi 1995). In terms of industrial sectors, women are concentrated more highly in the service industries whereas men are more likely to work in the goods-producing sector, especially manufacturing (Northrup 1990). The gender gap in wages arises because "female" occupations are lower paid than "male" occupations (Bianchi 1995) and, compared with manufacturing, work in the service sector is paid less, is more intermittent, and is more likely to be part-time (see Smith 1984).

Yet sex segregation in labor and gender inequality in wages are persistent and rather stable features of the American labor market. The gender gap in wages has not increased in years; rather it has diminished somewhat (see Reskin and Padavic 1994). By itself, therefore, gender inequality in wages cannot account for women's increasing economic disadvantage as compared with men. Rather, the gender gap in wages must be considered within the context of the surge in the prevalence of female-headed households. Because an increasing percentage of women are the sole breadwinners for themselves and their children (as opposed to living in male-headed and dual-earner households), gender inequality in wages means that these women are worse off economically than single men

and couples. Averaging across all women, this trend results in increasing economic marginalization of women as compared with men. Note that research finds that the contributions of absent fathers to female-headed families typically are insufficient or lacking completely, and thus, on average, do not eliminate the economic hardship of single-mother families (Garfinkel and McLanahan 1986).

The economic circumstances of women are complicated further by another set of economic trends. Although average wages in the United States have increased since the 1950s, the rate of growth slowed beginning in the 1970s and this trend has continued since. In addition, the gap between the incomes of high- and low-wage workers began to increase in the 1970s, creating greater income dispersion or inequality in the United States (Gottschalk 1997). Income dispersion grew rapidly in the 1970s, increased sharply in the early 1980s, slowed somewhat in the late 1980s, and then began to increase again in the early 1990s (see Levy and Murnane 1992; Karoly 1993; Freeman and Katz 1995; Bernstein and Mishel 1997). Economists show that the increases in income dispersion, at least through the late 1980s, are accounted for largely by declines in the wages of workers with less education (e.g., high school diploma) as compared with the wages of college-educated workers (Freeman and Katz 1995; Bernstein and Mishel 1997).

Income dispersion has grown among both women and men over recent decades (Fortin and Lemieux 1997).¹⁹ Once again, however, shifts in the composition of the American family have combined with economic trends to intensify the aggregate economic marginalization of women. Indeed, some economists find that increases in income inequality combine with the surge in numbers of female-headed households to account for the increases in the U.S. poverty rates between the early 1970s and 1990s (Danziger and Gottschalk 1995; Gottschalk 1997). It may be, then, that dispersion in income is more consequential for female-headed households than for other households.

The situation is exacerbated further because female heads of households are increasingly more likely to be unemployed than all females combined or than males. Exhibit 10 shows that unemployment rates increased between 1970 and 1976, declined slightly, and then began to rise again starting in 1980 to peak in the early 1980s. After 1970, levels of unemployment were consistently higher among female heads of households. At the peak in 1983, 12.2 percent of female heads were unemployed, compared with 9.2 percent of women overall and 9.9 percent of men (U.S. Department of Labor 1998). Whereas rates of unemployment have declined for all three groups since the early 1980s, unemployment among female heads remains high by comparison to all females combined and males. Moreover, the *relative* unemployment ratios of female heads of households compared with those of the other two groups have increased over

Exhibit 10. Unemployment rates by sex and female-headship

Year	Female heads of households	All females	Unemployment rate
1960	—	5.9	5.4
1961	—	7.2	6.4
1962	—	6.2	5.2
1963	—	6.5	5.2
1964	—	6.2	4.6
1965	—	5.5	4.0
1966	—	4.8	3.2
1967	4.9	5.2	3.1
1968	4.4	4.8	2.9
1969	4.4	4.7	2.8
1970	5.4	5.9	4.4
1971	7.3	6.9	5.3
1972	7.2	6.6	5.0
1973	7.1	6.0	4.2
1974	7.0	6.7	4.9
1975	10.0	9.3	7.9
1976	10.1	8.6	7.1
1977	9.4	8.2	6.3
1978	8.5	7.2	5.3
1979	8.3	6.8	5.1
1980	9.2	7.4	6.9
1981	10.4	7.9	7.4
1982	11.7	9.4	9.9
1983	12.2	9.2	9.9
1984	10.3	7.6	7.4
1985	10.4	7.4	7.0
1986	9.8	7.1	6.9
1987	9.2	6.2	6.2
1988	8.1	5.6	5.5
1989	8.1	5.4	5.2
1990	8.3	5.5	5.7
1991	9.3	6.4	7.2
1992	10.0	7.0	7.9
1993	9.7	6.6	7.2
1994	8.9	6.0	6.2
1995	8.0	5.6	5.6
1996	8.2	5.4	5.4
1997	8.1	5.0	4.9

Note: Unemployment rates are for the civilian population, 16 years and older.

Source: U.S. Department of Labor, Bureau of Labor Statistics 1998.

time. In 1971, female heads were 10 percent more likely to be unemployed than all females combined; by 1980, they were 20 percent more likely to be unemployed than all females; by 1990, they were 50 percent more likely to be unemployed than females overall; and in 1997, they were 60 percent more likely than women as a group to be unemployed. A similar pattern also emerges in comparison to male unemployment rates, and by 1997, female heads of household were 70 percent more likely than men to be unemployed. From an economic marginalization perspective, it is this increase in *relative* unemployment that is most important.

In sum, the growing economic marginalization of women over the past four decades likely reflects increases in numbers of women-headed households combined with the following: (1) the gender gap in wages and sex segregation of labor markets, with women being more likely to work in part-time and low-paying jobs in the service sector; (2) increases in wage inequality, with less educated workers falling farther behind better educated workers; and (3) increases in the relative unemployment of female heads of household as compared with all women combined and with men. As the proportion of female-headed households climbed dramatically in the 1970s and 1980s (see exhibit 7), the relative unemployment of female heads of household and dispersion in income across education levels also climbed. Together these trends heightened women's economic disadvantage relative to men. During this same time period, the proportion of arrests accounted for by women increased substantially for many crimes (see exhibits 1 through 6). This was particularly the case for some of the more serious property crimes and some violent crimes. For example, women's contributions to arrests for burglary and motor vehicle theft (exhibit 2) and to robbery and aggravated assault (exhibit 3) grew substantially during the 1970s and 1980s. These patterns are consistent with ethnographic cross-sectional studies that report that contemporary women offenders are likely to have little formal education, to be unemployed, or to work in low-paying, unstable jobs, such as many of those in the service sector.

In addition, women's contributions to arrests for several serious property and violent crimes (e.g., aggravated assault, other assault, motor vehicle theft, burglary, stolen property) increased sharply through the 1990s. Although the situation is less clear regarding increases in wage dispersion (see Bernstein and Mishel 1997), since 1990, the prevalence of female-headed households has continued to increase (exhibit 7) and the *relative* unemployment of female heads of households compared with other groups has increased somewhat (exhibit 10). Yet, it is unlikely that the substantial changes in the gender ratios of arrests during the 1990s are explained completely by the more modest increases in female-household heads and their relative unemployment. I return to this issue in "Toward a More Complete Explanation of Changes in Gender Ratios of Crime."

Changes in welfare and women's crime

Research also has highlighted the impact of changes in welfare on trends in the economic marginalization of women. Specifically, some scholars maintain that the erosion of the welfare "safety net" over recent decades has failed to buffer the financial hardships of female-headed households, and thus, has contributed to the increasing economic marginalization of women (e.g., Garfinkel and McLanahan 1986). In a cogent analysis of changes in welfare policies, Danziger and Gottschalk (1995, ch. 2) highlight the following patterns: Between 1964 and 1968, the welfare system was greatly expanded and benefit levels and spending on all programs increased between 1965 and 1975. At the same time, overall poverty rates dropped—from 19 percent of the population in 1964 to 11 percent in 1973 (U.S. Bureau of the Census 1998a). Unfortunately, the economic slide of the 1970s put a stop to this progress and poverty began to increase again. In addition, the real growth of welfare benefits began to decay by the late 1970s because they did not keep pace with inflation, and program expansion began to stagnate and virtually halted in the 1980s (Danziger and Gottschalk 1995). During this same period, there were important increases in economic inequality and wage dispersion, as discussed previously. In short, at the same time that economically marginalized women and men were falling farther behind, the safety net was shrinking.

The safety net, which has been shrinking as the gender ratio of crime has been rising, now is unraveling rapidly following the welfare reforms in the 1996 Personal Responsibility and Work Opportunity Reconciliation Act. Among other things, this Act requires recipients of welfare to work after 2 years of receiving aid and limits benefits to any given family to 5 years in their lifetime. Supporters of the Act view it as a panacea: They project that it will significantly curb public assistance, increase employment and income, and stem the tide of single-mother families (see Blank 1997). Essentially, supporters predict that the Act will help to ameliorate some aspects of the economic marginalization of women. If women's crime rates are related to their rates of economic disadvantage, as I have argued here, then we can add to the supporters' list the prediction that the reforms will halt the increase in the gender ratio of crime as well.

The chances that welfare reform will stem the tide of female-headed families appear to be small. A large selection of literature on the effects of welfare on the formation of two-parent families among low-income groups is discussed previously in this article, and the weight of the evidence from this research does not suggest a strong connection (see Moffitt 1992). Furthermore, some research suggests that the chances are small that recent welfare reforms will improve the circumstances of the economically disenfranchised, although it is too soon to know for certain. Most experiments with mandatory work programs (prior to welfare reform) have demonstrated that the low-wage work available to most welfare

recipients does not put them much ahead of their former benefits levels and, thus, does not help them to escape poverty (McCrate and Smith 1998). Furthermore, some researchers predict that forcing welfare recipients to take jobs likely will lead to a surge in low-skill workers and therefore a reduction in wages for these jobs (see McCrate 1997). Ironically, then, the recent changes in welfare may well amplify economic inequality among women rather than reduce it. *If* this proves to be the case, the economic marginalization hypothesis of women's offending would predict continued increases in women's crime.

Summary of patterns of women's economic marginalization and crime

The above discussion underscores the complexity of the sources of the increasing economic marginalization of women. During the 1960s, increasing rates of female-headed households, high levels of sex segregation of jobs, and increasing dispersion in income combined to produce what has become a long-term trend in the economic marginalization of women. The potentially devastating effects of these trends likely were ameliorated to some extent by the expansion of welfare during the 1960s and early 1970s; nevertheless these efforts did not counteract completely the dramatic economic changes that women experienced as a group. It is not surprising, therefore, that the percent of arrests accounted for by women for larceny, embezzlement, forgery, and, to a lesser extent, burglary and robbery all accelerated during this decade.

During the 1970s, the proportion of female-headed households surged upward, wage inequality across education levels began to climb, the gender gap in earnings persisted, and the relative unemployment of female heads of household compared with other groups increased somewhat. The welfare safety net began contracting at the same time, intensifying the hardships of economically marginalized women. Between 1970 and 1980, there also were substantial increases in the percentage of arrests accounted for by women for a variety of property and violent crimes, including forgery, burglary, motor vehicle theft, and robbery.

The prevalence of female-headed households, wage dispersion, and relative unemployment of female heads of household continued to increase through much of the 1980s. Yet the proportion of the poor in female-headed families declined somewhat during the recession of the early 1980s, presumably because the recession pushed borderline male-headed families into poverty as well. Women's contributions to almost all Index crimes increased, most dramatically for embezzlement, motor vehicle theft, and burglary, and less dramatically for larceny, forgery, robbery, and other assault. There seems to be some association, therefore, between changes in the gender ratio and the demographic and economic trends. Recall that murder is an exception to these patterns. Women's relative rates of homicide have decreased since 1960; the

gender ratio of arrests for homicide have continued to decline in recent years because the decrease in female rates of homicide has been greater than the corresponding decrease in male homicide rates.

During the 1990s, the prevalence of female-headship and relative unemployment of female heads of household have increased. Income dispersion may have increased somewhat, but the evidence for this is less clear (see Bernstein and Mishel 1997). There also has been a drastic unraveling of the welfare safety net during this time, and the percentages of the poor population residing in female-headed families consequently reached post-1960 high points in 1991 and 1995 (although its growth during the 1990s was very minimal compared with the dramatic surges of previous decades). In general, the economic situation of women as compared with men (above and beyond differences in poverty) probably continued to decline. Changes in the gender ratio of arrests for many crimes appears to be associated with these trends. The gender ratio continued its long-term acceleration for most crimes, and jumped sharply for many crimes, including embezzlement, motor vehicle theft, stolen property, burglary, arson, robbery, aggravated assault, and other assault. The sharper increase in the proportion of these crimes accounted for by females likely is not explained entirely by the relatively modest increases in the demographic and economic correlates discussed here, however. Other structural processes are likely at work; I return to this point later. Nevertheless, if the trends in women's economic marginalization continue over the next few years and the association noted with crime persists, the rising percentage of arrests accounted for by women could continue into the next century.

Changes in the economic well-being of women in the United States over the past four decades appear to stem from a variety of variables, such as increases in the prevalence of female-headed households, the persistent gender gap in wages, growth in the gap between the wages of high school-educated and college-educated workers, increases in the unemployment of female heads of households, and the erosion of welfare.

Toward a More Complete Explanation of Changes in Gender Ratios of Crime

Changes in the economic well-being of women in the United States over the past four decades appear to stem from a variety of variables, such as increases in the prevalence of female-headed households, the persistent gender gap in wages, growth in the gap between the wages of high school-educated and

college-educated workers, increases in the unemployment of female heads of households, and the erosion of welfare. Understanding the relationships between increases in women's economic marginalization and gender ratios of crime, therefore, requires consideration of the interplay between the demographic and economic trends discussed in "Trends in the Economic Marginalization of Women and the Gender Ratio of Crime." Although there appear to be some strong bivariate connections between these trends and changing gender ratios of crime, a description of the more complicated multivariate processes must await assessment using statistical methods.

Beyond this, future research should attempt to specify the mechanisms through which demographic and economic trends are translated into gender differences in crime. As I argued in "Studies of Women's Poverty and Crime" in this article, qualitative and ethnographic work on women offenders offers a starting point by illuminating how neighborhood context, family processes, deviant networks, attitudes, motives, decisionmaking processes, and neighborhood context link poverty to women's crime. Some important themes emerged in this body of research.

First, most recent studies of female criminals highlight the disorganization and deterioration of the communities in which these women live; some studies suggest that the social isolation these women experience combines with their economic disadvantage to create circumstances conducive to crime. Consistent with other research in sociology (Wilson 1987) and criminology (e.g., Peterson and Krivo 1993; Shihadeh and Flynn 1996), some studies imply that geographic and cultural separation from more advantaged segments of society fosters crime among women in disadvantaged and deteriorating communities (see Miller 1986; Maher 1997; Baskin and Sommers 1998). If extremely disadvantaged people have experienced increased social isolation in recent years—walled off in ghettos and separated from mainstream culture—and if social isolation has a greater impact on women, then this might account for sharp increases in the gender ratios of some crimes since 1990. Many of these increases are more pronounced than recent changes in the relative economic circumstances of women and men, *per se*.

Moreover, the emphasis on social isolation focuses attention squarely on the role of race, and thus raises questions that should be a priority of future research. To what extent are changes in gender ratios of crime accounted for by changes in the rates of crime by women of color? If minority women contribute largely to changing gender ratios, to what extent are these changes explained by the structural disadvantage versus the social isolation of these women? If social isolation of minorities does contribute to changing gender ratios, what are the precise components of social isolation that have an impact on offending? Because

UCR do not allow for the disaggregation of arrest rates by race and gender simultaneously, answering these questions would require collecting data from a sample of law enforcement agencies, and linking these indicators of structural disadvantage and social isolation in the corresponding jurisdictions.

The ethnographic literature also suggests some mechanisms through which structural disadvantage and isolation might shape the family processes, deviant networks, attitudes, and motives that lead women to commit crime. Our understanding of the relationship between women's economic marginalization and gender ratios of crime would be advanced by research that carefully links these group- and individual-level mechanisms to the demographic and economic correlates discussed in the previous section. Although it would be virtually impossible to obtain data to assess how *changes* in the economic circumstances of women are associated with changes in family processes, deviant networks, attitudes, and motives, studies could assess the contemporary interrelationships between these factors and the structural correlates. This might suggest some avenues to pursue in further developing links between structural-level and individual-level processes.

As noted in "Studies of Women's Poverty and Crime," studies of women offenders have emphasized particular aspects of group- and individual-level processes that diverge from the traditional foci of criminology. For example, some studies have reported that women offenders, particularly violent offenders, experienced high levels of abuse during childhood and adolescence (e.g., Maher 1997; Daly 1994). In addition, many studies showed that women's crime was often motivated by the desire to provide for or take care of other people, including their children (e.g., Miller 1986; Carlen 1988). Other research has suggested that women's and men's motives for violent crime may differ, with women using violence to ward off potential victimization (Maher 1997) and men using violence to display masculinity and claim gender (Messerschmidt 1993). These studies thus draw attention to variation in the processes leading to female and male offending. Future development of the marginalization thesis could address how the structural correlates of changing gender ratios of crime are associated with variation across gender in these individual-level processes.

In sum, further research is needed to build a more complete explanation of changing gender ratios of crime. One avenue that research must pursue is the development of statistical tests of the contributions of the various demographic and economic trends discussed in "Trends in the Economic Marginalization of Women and the Gender Ratio of Crime," including increases in the prevalence of female-headed households, the gender gap in wages, increases in income dispersion, and increases in the unemployment of female heads of household. A second avenue for research is the elaboration of the theoretical basis of the

economic marginalization thesis by showing how the demographic and economic factors creating women's marginalization influence the group- and individual-level mechanisms that give rise to gender differences in offending. As researchers move forward toward these goals, our understanding of the sources of gender differences in crime, and thus our understanding of the causes of crime more generally, will increase.

This paper has benefited from statistical advice and comments from Joseph B. Lang, research assistance by Stacy De Coster and Thomas D. Stucky, and helpful comments from Gary LaFree and the editorial board of this volume. Please address all correspondence to Karen Heimer, Department of Sociology, University of Iowa, W140 Seashore Hall, Iowa City, IA 52242. E-mail: karenheimer@uiowa.edu.

Notes

1. I focus on major property and violent crimes here, excluding rape and prostitution because the former is a historically "male offense" and the latter is a historically "female offense," at least in terms of police arrest data. I also exclude offenses against families and children because changes in mandatory child abuse reporting laws during the period covered could well account for any observed increases in arrests. I also exclude drug offenses.
2. As LaFree, Drass, and O'Day (1992, footnote 7) note, the published UCR arrest data began in 1974 to include data from jurisdictions with coverage that did not include all 12 months of the year. The data reported here purge data from 12-month incomplete jurisdictions, so as to avoid potential problems in comparing figures pre- and post-1974.
3. The measures used here and presented in exhibits 1 through 6 are computed as follows:

$$\begin{aligned} \text{Female contribution} &= 100 \left(\frac{\text{adult female arrests/adult female population}}{\{\text{adult female arrests/adult female population}\} + \{\text{adult male arrests/adult male population}\}} \right) \\ \text{to arrests} & \\ \\ \text{Gender ratio} &= \frac{(\text{adult female arrests/adult female population})}{(\text{adult male arrests/adult male population})} \\ \text{of arrests} & \end{aligned}$$

Because the age and gender breakdowns of the populations in the UCR jurisdictions with 12-month complete data are unknown, I use the figures for adult males and females in the U.S. population as a whole, and assume that the ratio of female to male population in the jurisdictions covered by the UCR data are roughly equivalent to the U.S. population ratio. I do not need to adjust these measures for the population figures for UCR jurisdictions

because only the female-to-male population *ratio* is needed to compute these measures (not the actual numbers of females and males in the population).

4. Conditional on the number of male arrests, male population, and female population, the numbers of female arrests for noncontiguous years (1965, 1975, 1985, 1995) were assumed to be observed values of independent Poisson random variables. A Poisson regression model that allowed for a relationship between log gender ratio (where gender ratio=female population age-adjusted arrest rate/male population age-adjusted arrest rate) and time was estimated using Maximum Likelihood estimation procedures in SAS for each of the types of offenses discussed here. A Normal Linear model is inappropriate in this situation because the mean and variance are functionally unrelated and therefore one needs many observations to estimate error variances and conduct inference. This is not possible with the small sample size used here ($n=4$ decades). By contrast, because the Poisson distribution has mean equal to variance, it is possible to conduct inference with very few observations, provided that counts are large. Moreover, count and rate data often violate the Normal Linear model's assumption of homogeneity of variance. Count and rate data often exhibit heterogeneity of variance, and larger counts correspond to greater variability. Because this is a characteristic of the Poisson regression model, it is used often for analyzing count and rate data (cf. McCullagh and Nelder 1989; Agresti 1990).

5. Throughout the past 20 years, arrest for other assault was the second most common type of arrest among females, following arrest for larceny. Among males, arrest for other assault was the most common type of arrest from 1991 to 1997; from 1977 to 1990, arrest for larceny was the most common type of arrest, and arrest for other assault was the second most common type of arrest.

6. Changes in domestic abuse reporting laws may have influenced the figures for other assault in some jurisdictions if domestic abuse was reported by police under the category of other assault, rather than under the category of domestic assault (not analyzed in the present study due to changes in reporting requirements). Nevertheless, it seems likely that this would occur regardless of the sex of the offender; any artificial escalation of rates of other assault, therefore, would occur for both males and females. Because the focus here is on the gender ratio, any changes that are due to reporting differences affecting both female and male arrest rates likely would cancel each other out.

7. Some researchers have dismissed the problem of female crime in the past because women accounted for such "trivial" proportions of crimes like burglary and robbery. The recent increases in women's contributions to almost all offenses have resulted in levels that clearly are nontrivial and can no longer be ignored or dismissed.

8. A variation on the economic marginalization thesis is offered by Braithwaite (1979, 235). It specifies that the women's movement encouraged increased expectations of gender equality, yet the objective economic and political causes of that inequality remained intact. The resulting gap between women's reality and their aspirations therefore provides an impetus for increases in women's offending. This argument is consistent with anomie

explanations of crime on the structural level and strain theory explanations on the individual level. This interpretation has not been subjected to empirical testing, according to my review of the literature.

9. Steffensmeier and Allan (1996) suggest that improved record processing in the 1960s may also have contributed to the increase in female offending. Note, however, that this does not explain changes in female crime since the 1960s, nor does it explain changes in the gender ratio of arrests, as male crime and female crime reporting would presumably occur through the same recordkeeping procedures and processing.

10. Chesney-Lind (1989, 1997) maintains that the chivalry hypothesis is misguided, at least with regard to arrests for juvenile delinquency. Specifically, she reports that from the 1970s until the 1990s, girls were more likely than boys to be arrested and processed within the juvenile justice system for minor offenses, particularly status offenses like running away and curfew violations, despite efforts to divert status offenders from the juvenile justice system (1997). She argues that there is a double standard in juvenile justice that reflects a patriarchal concern in society with controlling females, particularly the sexual behavior of young girls (see also Smart 1976, 1979). Consequently, she predicts that girls will be treated more harshly than boys when they commit status offenses. Moreover, she does not view this patriarchal control as changing greatly over time. Research using multivariate statistical methods and controlling for some legally relevant variables, however, finds that girls receive more lenient treatment overall for less serious misdemeanors and there is no gender difference in dispositions for serious offenses (Johnson and Scheuble 1991). One might argue that even if Chesney-Lind is correct and there is reverse discrimination in arrest, it is confined to minor or sexual offenses among juveniles and thus is not relevant for either more serious offenses or adults.

11. However, in a recent comparative study of women's and men's robbery, Jody Miller (1998) observes that the motives given by women and men are rather similar (and thus the meaning of robbery may not be that different across gender), although the strategies used to accomplish robbery differ across gender.

12. Note that much of the annual national data bearing on women's economic circumstances extends back only through the 1960s and the beginning of the Current Population Studies.

13. The divorce rate has doubled since 1960 and rates of births to single mothers have jumped from 21.6 per 1,000 childbearing-age women in 1960 to 44.8 per 1,000 in 1996 (U.S. Department of Health and Human Services 1996, 1998; Ventura 1995).

14. These figures refer to households with and without children present. When households with children under 18 years—which are referred to as families, by convention—are considered, poverty rates are increased for both female-headed and all families combined (U.S. Bureau of the Census 1998b, table C-3).

15. Bane (1986, 218) decomposes the change in the proportion of the poor living in female-headed households from 1959 to 1979 and shows that slightly more than half of the change is due to the increasing numbers of female-headed households, although somewhat less than half of the change is due to the increasing poverty of these households vis-a-vis other households.
16. Female-headed households are household units, with or without children under 18 present. Female-headed families, by comparison, are household units with children under 18.
17. There also is a race gap in wages—in 1997, Hispanic women earned only 75 percent of white women's wages and African-American women earned 87 percent of white women's wages (U.S. Bureau of the Census 1998b). Race and gender thus combine to doubly disadvantage women of color.
18. The gender gap in wages has been attributed to both the human capital of women (i.e., characteristics related to productivity, such as education, experience, and effort) and to discrimination and sex segregation in labor markets (England 1992; Marini 1989). Some research suggests that sex differences in human capital account for only a small fraction of the gender gap in earnings (e.g., Bielby and Bielby 1988; Tomaskovic-Devey 1993). Sex discrimination in pay for the same work also appears to account for little of the gender gap in wages (see Reskin and Padavic 1994).
19. A study of gender differences in the source of these changes reports that about one-third of the increase in dispersion among women between 1979 and 1988 can be traced to the declining value of the minimum wage; by contrast, the value of the minimum wage accounts for less of the dispersion in men's wages (Fortin and Lemieux 1997, 88). This finding most likely reflects the overrepresentation of women in service-sector jobs, which are more likely to pay minimum wage than jobs in other sectors.

References

- Adler, Freda. 1975. *Sisters in crime*. New York: McGraw-Hill.
- Agresti, Alan. 1990. *Categorical data analysis*. New York: Wiley Interscience.
- Alarid, Leanne Fiftal, James Q. Marquart, Velmer S. Burton, Francis T. Cullen, and Steven J. Cuvelier. 1996. Women's roles in serious offenses: A study of adult felons. *Justice Quarterly* 13 (September): 431–454.
- Anderson, Elijah. 1999. *Code of the street: Decency, violence, and the moral life of the inner city*. New York: W.W. Norton.
- Austin, Roy L. 1982. Women's liberation and increases in minor, major, and occupational offenses. *Criminology* 20 (November): 407–430.

- Bane, Mary Jo. 1986. Household composition and poverty. In *Fighting poverty: What works and what doesn't*, edited by Sheldon H. Danziger and Daniel H. Weinberg. Cambridge: Harvard University Press.
- Baskin, Deborah R., and Ira B. Sommers. 1998. *Casualties of community disorder*. Boulder, Colorado: Westview Press.
- Baskin, Deborah, Ira Sommers, and Jeffrey Fagan. 1993. The political economy of violent female street crime. *Fordham Urban Law Journal* 20:401–417.
- Becker, Gary S. 1981. *A treatise on the family*. Cambridge: Harvard University Press.
- Bergmann, Barbara R. 1986. *The economic emergence of women*. New York: Basic Books.
- Bernstein, Jared, and Lawrence Mishel. 1997. Has wage inequality stopped growing? *Monthly Labor Review* (December): 3–16.
- Bianchi, Suzanne M. 1995. Changing economic roles of women and men. In *State of the union: America in the 1990s*, edited by Reynolds Farley. Vol. 1. New York: Russell Sage Foundation.
- Bielby, Denise B., and William T. Bielby. 1988. She works hard for the money: Household responsibilities and the allocation of work effort. *American Journal of Sociology* 93 (March): 1031–1059.
- Blank, Rebecca M. 1997. The 1996 welfare reform. *Journal of Economic Perspectives* 11 (Winter): 169–177.
- Blau, Judith R., and Peter M. Blau. 1982. The costs of inequality: Metropolitan structure and violent crime. *American Sociological Review* 47 (February): 114–129.
- Box, Steven. 1987. *Recession, crime, and punishment*. London: Macmillan Education.
- . 1983. *Power, crime, and mystification*. London: Tavistock.
- Box, Steven, and Chris Hale. 1984. Liberation/emancipation, economic marginalization, or less chivalry: The relevance of three theoretical arguments to female crime patterns in England and Wales, 1951–1980. *Criminology* 22 (November): 473–497.
- . 1983. Liberation and female criminality in England and Wales. *British Journal of Criminology* 23 (January): 35–49.
- Braithwaite, John. 1979. *Inequality, crime, and public policy*. London: Routledge & Kegan Paul.
- Bursik, Robert J., Jr., and Harold G. Grasmick. 1993. *Neighborhoods and crime: The dimensions of effective community control*. New York: Lexington Books.

- Campbell, Anne. 1984. *The girls in the gang*. New York: Blackwell.
- Carlen, Pat. 1988. *Women, crime, and poverty*. Milton Keynes, England: Open University Press.
- Chesney-Lind, Meda. 1997. *The female offender: Girls, women, and crime*. Thousand Oaks, California: Sage Publications.
- . 1989. Girls' crime and woman's place: Toward a feminist model of female delinquency. *Crime & Delinquency* 35 (January): 5–29.
- Chesney-Lind, Meda, and Randal G. Shelden. 1998. *Girls, delinquency, and juvenile justice*. 2d ed. Belmont, California: Wadsworth Publishing Company.
- Chilton, Roland, and Susan K. Datesman. 1987. Gender, race, and crime: An analysis of urban arrest trends, 1960–1980. *Gender & Society* 1 (June): 152–171.
- Daly, Kathleen. 1994. *Gender, crime, and punishment*. New Haven: Yale University Press.
- . 1989. Gender and varieties of white-collar crime. *Criminology* 27 (November): 769–794.
- Daly, Kathleen, and Meda Chesney-Lind. 1988. Feminism and criminology. *Justice Quarterly* 5 (December): 497–538.
- Danziger, Sheldon, and Peter Gottschalk. 1995. *America the unequal*. New York: Russell Sage Foundation.
- Ellwood, David T., and Mary Jo Bane. 1985. The impact of AFDC on family structure and living arrangements. *Research in Labor Economics* 7:137–207.
- England, Paula. 1992. *Comparable worth: Theories and evidence*. New York: Aldine de Gruyter.
- Espenshade, Thomas J. 1985. Marriage trends in America: Estimates, implications, and underlying causes. *Population and Development Review* 11 (June): 193–245.
- Fortin, Nicole M., and Thomas Lemieux. 1997. Institutional changes and rising wage inequality: Is there a linkage? *Journal of Economic Perspectives* 11 (Spring): 75–96.
- Fox, John, and Timothy F. Hartnagel. 1979. Changing social roles and female crime in Canada: A time series analysis. *Canadian Review of Sociology and Anthropology* 16 (1): 96–104.
- Freeman, Richard B., and Lawrence F. Katz, eds. 1995. *Differences and changes in wage structures*. Chicago: University of Chicago Press.

- Garfinkel, Irwin, and Sara S. McLanahan. 1986. *Single mothers and their children*. Washington, D.C.: Urban Institute.
- Giordano, Peggy C., and Stephen A. Cernkovich. 1979. On complicating the relationship between liberation and delinquency. *Social Problems* 26 (November): 467–481.
- Giordano, Peggy C., Sandra Kerbel, and Sandra Dudley. 1981. The economics of female criminality: An analysis of police blotters, 1890–1975. In *Women and crime in America*, edited by Lee H. Bowker. New York: Macmillan.
- Goldin, Claudia. 1990. *Understanding the gender gap*. New York: Oxford University Press.
- Gottschalk, Peter. 1997. Inequality, income growth, and mobility: The basic facts. *Journal of Economic Perspectives* 11 (Spring): 21–40.
- Hartmann, Heidi. 1981. The family as the locus of gender, class, and political struggle: The example of housework. *Signs* 6 (Spring): 336–394.
- Heidensohn, Frances M. 1985. *Women & crime: The life of the female offender*. New York: New York University Press.
- Heimer, Karen. 1996. Gender, interaction, and delinquency: Testing a theory of differential social control. *Social Psychology Quarterly* 59 (March): 39–61.
- Heimer, Karen, and Stacy De Coster. 1999. The gendering of violent delinquency. *Criminology* 37 (May): 277–317.
- Hindelang, Michael J. 1981. Variations in sex-race-age-specific incidence rates of offending. *American Sociological Review* 46 (August): 461–474.
- Horwitz, Allan V., and Helene Raskin White. 1987. Gender role orientations and styles of pathology among adolescents. *Journal of Health and Social Behavior* 28 (June): 158–170.
- Joe, Karen, and Meda Chesney-Lind. 1995. Just every mother's angel: An analysis of gender and the ethnic variations in youth gang membership. *Gender & Society* 9 (December): 408–430.
- Johnson, David R., and Laurie K. Scheuble. 1991. Gender bias in the disposition of juvenile court referrals: The effects of time and location. *Criminology* 29 (November): 677–699.
- Karoly, Lynn A. 1993. The trend in inequality among families, individuals, and workers in the United States: A twenty-five year perspective. In *Uneven tides: Rising inequality in America*, edited by Sheldon Danziger and Peter Gottschalk. New York: Russell Sage Foundation.

- LaFree, Gary. 1998. *Losing legitimacy: Street crime and the decline of social institutions in America*. Boulder, Colorado: Westview Press.
- LaFree, Gary, Kriss A. Drass, and Patrick O'Day. 1992. Race and crime in postwar America: Determinants of African-American and white rates, 1957–1988. *Criminology* 30 (May): 157–188.
- Levy, Frank, and Richard Murnane. 1992. U.S. earnings levels and earnings inequality: A review of recent trends and proposed explanations. *Journal of Economic Literature* (September): 1333–1381.
- Lichter, Daniel T., Felicia B. LeClere, and Diane K. McLaughlin. 1991. Local marriage markets and the marital behavior of black and white women. *American Journal of Sociology* 96 (January): 843–867.
- Lichter, Daniel T., Diane K. McLaughlin, and David C. Ribar. 1997. Welfare and the rise in female-headed families. *American Journal of Sociology* 103 (July): 112–143.
- Lichter, Daniel T., Diane K. McLaughlin, George Kephart, and David J. Landry. 1992. Race and the retreat from marriage: A shortage of marriageable men? *American Sociological Review* 57 (December): 781–799.
- Liebertson, Stanley. 1985. *Making it count*. Berkeley: University of California Press.
- Maher, Lisa. 1997. *Sexed work: Gender, race, and resistance in a Brooklyn drug market*. New York: Oxford University Press.
- Maher, Lisa, and Kathleen Daly. 1996. Women in the street-level drug economy: Continuity or change? *Criminology* 34 (November): 465–491.
- Mare, Robert, and Christopher Winship. 1991. Socioeconomic change and the decline in marriage for blacks and whites. In *The urban underclass*, edited by Christopher Jencks and Paul E. Peterson. Washington, D.C.: Brookings Institute.
- Marini, Margaret Mooney. 1989. Sex differences in earnings in the United States. *Annual Review of Sociology* 15:343–380.
- McCrate, Elaine. 1997. Welfare and women's earnings. *Politics and Society* 25 (December): 417–442.
- McCrate, Elaine, and Joan Smith. 1998. When work doesn't work: The failure of current welfare reform. *Gender & Society* 12 (February): 61–80.
- McCullagh, Peter, and John Ashworth Nelder. 1989. *Generalized linear models*. 2d ed. London: Chapman & Hall.
- McLanahan, Sara, and Lynne Casper. 1995. Growing diversity and inequality in the American family. In *State of the union: America in the 1990s*, edited by Reynolds Farley. Vol. 2. New York: Russell Sage Foundation.

- McLaughlin, Diane K., and Daniel T. Lichter. 1997. Poverty and the marital behavior of young women. *Journal of Marriage and the Family* 59 (August): 582–594.
- Messerschmidt, James W. 1993. *Masculinities and crime*. Lanham, Maryland: Rowman & Littlefield.
- . 1986. *Capitalism, patriarchy, and crime: Toward a socialist feminist criminology*. Totowa, New Jersey: Rowman & Littlefield.
- Miller, Eleanor M. 1986. *Street woman*. Philadelphia: Temple University Press.
- Miller, Jody. 1998. Up it up: Gender and the accomplishment of street robbery. *Criminology* 36 (February): 37–65.
- Moffitt, Robert. 1994. Welfare effects on female headship with area effects. *Journal of Human Resources* 29 (Spring): 621–636.
- . 1992. Incentive effects of the U.S. welfare system: A review. *Journal of Economic Literature* 30 (March): 1–61.
- Murray, Charles. 1993. Welfare and the family: The U.S. experience. *Journal of Labor Economics* 11 (January): S224–S262.
- Noblit, George W., and Janie W. Burcart. 1976. Women and crime: 1960–1970. *Social Science Quarterly* 56 (March): 650–657.
- Northrup, Emily. 1990. The feminization of poverty: The demographic factor and the composition of economic growth. *Journal of Economic Issues* 24 (March): 145–161.
- O'Brien, Robert. 1985. *Crime and victimization*. Beverly Hills: Sage Publications.
- Oppenheimer, Valerie Kincade. 1997. Women's employment and the gain to marriage: The specialization and trading model. *Annual Review of Sociology* 23:431–453.
- Pearce, Diana. 1978. The feminization of poverty: Women, work, and welfare. *Urban and Social Change Review* 11 (February): 28–36.
- Peterson, Ruth D., and Lauren J. Krivo. 1993. Racial segregation and urban black homicide. *Social Forces* 71 (June): 1001–1026.
- Qian, Zhenchao, and Samuel H. Preston. 1993. Changes in American marriage, 1972–1987: Availability and forces of attraction by age and education. *American Sociological Review* 58 (August): 482–495.
- Reskin, Barbara, and Irene Padavic. 1994. *Women and men at work*. Thousand Oaks, California: Pine Forge Press.
- Rodgers, Harrell R., Jr. 1996. *Poor women, poor children: American poverty in the 1990s*. 3d ed. Armonk, New York: M.E. Sharpe.

- Romenesko, Kim, and Eleanor M. Miller. 1989. The second step in double jeopardy: Appropriating the labor of female street hustlers. *Crime & Delinquency* 35 (January): 109–135.
- Schultz, T. Paul. 1994. Marital status and fertility in the United States. *Journal of Human Resources* 29 (Spring): 637–667.
- Shihadeh, Edward S., and Nicole Flynn. 1996. Segregation and crime: The effects of black social isolation on rates of black urban violence. *Social Forces* 73 (June): 1325–1352.
- Shover, Neal, Stephen Norland, Jennifer James, and William E. Thornton. 1979. Gender roles and delinquency. *Social Forces* 58 (September): 162–175.
- Simon, Rita James. 1976. Women and crime revisited. *Social Science Quarterly* 56 (March): 658–663.
- . 1975. *Women and crime*. Lexington, Massachusetts: Lexington Books.
- Simon, Rita J., and Jean Landis. 1991. *The crimes women commit and the punishments they receive*. Lexington, Massachusetts: Lexington Books.
- Simpson, Sally, and Lori Elis. 1995. Doing gender: Sorting out the caste and crime conundrum. *Criminology* 33 (February): 47–79.
- Smart, Carol. 1979. The new female criminal: Reality or myth? *British Journal of Criminology* 19 (January): 50–59.
- . 1976. *Women, crime, and criminology*. London: Routledge & Kegan Paul.
- Smith, Joan. 1984. The paradox of women's poverty: Wage-earning women and economic transformation. *Signs* 10 (Winter): 291–310.
- Steffensmeier, Darrell J. 1993. National trends in female arrests: 1960–1990: Assessments and recommendations for research. *Journal of Quantitative Criminology* 9 (December): 411–441.
- . 1983. Organization properties and sex-segregation in the underworld: Building a sociological theory of sex differences in crime. *Social Forces* 61 (June): 1010–1032.
- . 1980. Sex differences in patterns of adult crime, 1965–77: A review and assessment. *Social Forces* 58 (June): 1080–1108.
- . 1978. Crime and the contemporary woman: An analysis of changing levels of female property crime, 1960–75. *Social Forces* 57 (December): 566–584.
- Steffensmeier, Darrell J., and Emilie Andersen Allan. 1996. Gender and crime: Toward a gendered theory of female offending. *Annual Review of Sociology* 22:459–487.

———. 1988. Sex disparities in arrest by residence, race, and age: An assessment of the gender convergence/crime hypothesis. *Justice Quarterly* 5 (March): 53–80.

Steffensmeier, Darrell J., and Michael J. Cobb. 1981. Sex differences in urban arrest patterns, 1934–79. *Social Problems* 29 (October): 37–50.

Steffensmeier, Darrell J., and Dana Haynie. Forthcoming. Gender, structural disadvantage, and urban crime: Do macrosocial variables also explain female offending rates? *Criminology*.

Steffensmeier, Darrell J., and Cathy Streifel. 1992. Time-series analysis of the female percentage of arrests for property crimes, 1960–1985: A test of alternative explanations. *Justice Quarterly* 9 (March): 77–103.

Sutherland, Edwin H. 1947. *Principles of criminology*. 4th ed. Philadelphia: J.B. Lippincott.

Sweet, James A., and Larry Bumpass. 1987. *American families and households*. New York: Russell Sage Foundation.

Tomaskovic-Devey, Donald. 1993. The gender and race composition of jobs and the male/female, white/black pay gap. *Social Forces* 72 (September): 45–76.

Treiman, Donald J., and Heidi Hartmann. 1981. *Women, work, and wages*. Washington, D.C.: National Academy Press.

U.S. Bureau of the Census. 1998a. *Measuring 50 years of economic change—using the March current population survey*. Current Population Reports, Series P60–203. Prepared by the Economics and Statistics Administration, Bureau of the Census. Washington, D.C.

———. 1998b. *Money income in the United States: 1996*. Current Population Reports, Consumer Income, Series P60–197. Prepared by the Economics and Statistics Administration, Bureau of the Census. Washington, D.C.

———. 1998c. *Poverty in the United States: 1997*. Current Population Reports, Consumer Income, Series P60–201. Prepared by the Economics and Statistics Administration, Bureau of the Census. Washington, D.C.

U.S. Department of Health and Human Services, National Center for Health Statistics, Public Health Service. 1998. *Births, marriages, divorces, and deaths for 1997*. Monthly Vital Statistics Report, vol. 46, no. 12. Hyattsville, Maryland.

———. 1996. *Vital statistics of the United States, volume III, marriage and divorce*. Hyattsville, Maryland.

U.S. Department of Labor, Bureau of Labor Statistics. 1998. Labor force statistics from the current population survey. Series LFU21000001, LFU21000002, and LFU210612002. Retrieved 3 January 2000 from the World Wide Web: <http://146.142.4.24/cgi-bin/srgate>.

Ventura, S.J. 1995. *Births to unmarried mothers: United States, 1980–92*. Vital and Health Statistics series 21, no. 53. Hyattsville, Maryland: U.S. Department of Health and Human Services, National Center for Health Statistics, Public Health Service.

Wetzel, James R. 1990. American families: 75 years of change. *Monthly Labor Review* 113 (March): 4–13.

Widom, Catherine C. 1979. Female offenders: Three assumptions about self-esteem, sex-role identity, and feminism. *Criminal Justice and Behavior* 6 (December): 365–382.

Wilson, William Julius. 1987. *The truly disadvantaged*. Chicago: University of Chicago Press.

Wolfe, Nancy T., Francis T. Cullen, and John B. Cullen. 1984. Describing the female offender: A note on the demographics of arrest. *Journal of Criminal Justice* 12:483–492.

Wood, Robert G. 1995. Marriage rates and marriageable men: A test of the Wilson hypothesis. *Journal of Human Resources* 30 (Winter): 162–193.

Zietz, D. 1981. *Women who embezzle or defraud: A study of convicted felons*. New York: Praeger.

On Immigration and Crime

by Ramiro Martinez, Jr., and Matthew T. Lee

The connection between immigration and crime is one of the most contentious topics in contemporary society. These discussions are not new, as debates on the issue date back more than 100 years. A general point on which both pro- and anti-immigration writers agree is that, as we enter the new millennium, the latest wave of immigration is likely to have a more important impact on society than any other social issue. In this essay, we survey the vast body of theoretical and empirical works on the relationship between immigration and crime in 20th-century America. Throughout, we include new writings as well as older, sometimes neglected works. We discuss three major theoretical perspectives that have guided explanations of the immigration/crime link: opportunity structure, cultural approaches, and social disorganization. We also examine empirical studies of immigrant involvement in crime. We conclude with a review of public opinion about immigrants, especially as it relates to immigrants and crime, and then provide original data on the connection between public opinion and immigrant crime.

There are important reasons to believe that immigrants should be involved in crime to a greater degree than native-born Americans. For example, immigrants face acculturation and assimilation problems that most natives do not, and immigrants tend to settle in disorganized

Ramiro Martinez, Jr., is Associate Professor of Criminology and Criminal Justice at Florida International University in Miami and a member of the National Consortium on Violence Research at Carnegie Mellon University. Matthew T. Lee is Assistant Professor of Sociology at the University of Akron in Ohio.

neighborhoods characterized by structural characteristics often associated with crime, such as widespread poverty, ethnic heterogeneity, and a preponderance of young males. However, despite claims by pundits and writers that high levels of “immigrant crime” are an unavoidable product of immigration, scholars rarely produce any systematic evidence of this recently reemerging social problem.

Although a host of reasons exists to expect that immigrants are high-crime prone, the bulk of empirical studies conducted over the past century have found that immigrants are typically underrepresented in criminal statistics. There are some partial exceptions to this finding, but these appear to be linked more to differences in structural conditions across urban areas where immigrants settle rather than to the cultural traditions of the immigrant groups. Local context is a central influence shaping the criminal involvement of both immigrants and natives, but in many cases, compared with native groups, immigrants seem better able to withstand crime-facilitating conditions than native groups. In conclusion, this review suggests that native groups would profit from a better understanding of how immigrant groups faced with adverse social conditions maintain low rates of crime.

The linkage between immigrants and crime is one of the most controversial contemporary social issues. Discussions of this relationship are notably contentious; they are also not new, as debates on the matter date back more than 100 years. The one point on which writers both pro- and anti-immigration agree is that as we enter the new millennium the latest wave of immigration is likely to have a more significant impact on society than any other social issue (Suarez-Orozco 1998; Brimelow 1996). If the past is any guide, the immigrant-crime relationship will be at the center of attempts to make sense of this impact.

Historically, public opinion about immigration, and the immigrant-crime link especially, has been formed by stereotypes more often than reliable empirical data (Espenshade and Belanger 1998; Simon 1985). Similarly, early 20th-century immigration policy was guided more by questionable research and prejudicial beliefs than a solid foundation of knowledge based on the existing scientific literature (as cited in Sellin 1938). It is therefore essential to systematically review the scholarly literature on immigration and crime so that current public and policy debates may be better informed.

In this essay, we survey the vast body of theoretical and empirical works on the relationship between immigration and crime in 20th-century America. Throughout, we include both contemporary writings as well as older, sometimes neglected works. It is important to note that this literature is problematic in at least three ways (see Short 1997; Marshall 1997): (1) discussions of a particular immigrant group usually mask the wide variations in living conditions (e.g., socioeconomic status) of persons within that group; (2) the use of broad racial and ethnic categories conceals important subgroup differences and makes comparisons across studies difficult (e.g., Asian immigrants may be grouped together in one study but treated separately in another study as Filipinos, Chinese, Vietnamese, etc.); and (3) patterns of criminal involvement vary widely across generations of immigrant groups, and there is no agreed-upon rule for determining how many generations should pass before “immigrants” can be considered “natives.”

In the first section of this essay, we discuss the three major theoretical perspectives that have guided explanations of the immigration-crime link: opportunity

Historically, public opinion about immigration, and the immigrant-crime link especially, has been formed by stereotypes more often than reliable empirical data. Similarly, early 20th-century immigration policy was guided more by questionable research and prejudicial beliefs than a solid foundation of knowledge based on the existing scientific literature.

structure, cultural approaches, and social disorganization (see Bankston 1998). Next, we examine empirical studies of immigrant involvement in crime. We have organized this body of research into subsections on group-specific comparisons of early and recent immigrants in the United States. Finally, we review public opinion about immigrants, especially as it relates to immigrants and crime, and then provide original data on the relationship between public opinions and immigrant crime.

Theoretical Perspectives

A seemingly infinite variety of explanations have been proposed to make sense of the voluminous and often contradictory data produced by research on the relationship between immigration and crime. Some early 20th-century American writers alleged that immigrant groups were biologically deficient compared with nonimmigrants and that crime was one of a host of deleterious outcomes that could be expected as long as “inferior” immigrants were allowed to enter the country. For example, one writer feared that immigration was likely to “destroy the inherent racial and family-stock qualities—physical, mental, and spiritual—of the people of the immigrant-receiving country” (Laughlin 1939, 5). Much of this biologically oriented work was associated with the long-discredited eugenics movement, and although it failed to provide solid empirical evidence to back such claims, these ideas did guide U.S. immigration legislation in the 1920s (Sellin 1938; Hagan and Palloni 1998).

Current popular theories tend to emphasize social-psychological (e.g., stress from acculturation pressures) or, more often, sociological variables (e.g., community disorganization). There is much disagreement between and within schools of thought as to the importance of different factors, but most theoretical work can be classified into one of the major perspectives mentioned in the next section. Explanations usually draw on several theoretical elements, and it is surely an analytical contrivance to think that “cultural” factors can be separated from their “structural” contexts.

Opportunity structure

Opportunity structure theories stress the material and social structures that shape the values and activities of groups in American society (Bankston 1998). Because legitimate opportunities for wealth and social status are not equally available to all groups, some will “innovate” by taking advantage of available illegitimate opportunities. This type of explanation was popularized by Merton (1938) and draws attention to the ways in which disadvantaged groups (which often includes immigrants) may be denied the legitimate means (e.g., jobs) to

attain culturally prescribed goals (e.g., a middle-class lifestyle). Cloward and Ohlin (1960) added the notion that some groups, particularly those living in “high crime” urban areas, have more illegitimate opportunities than others.

Scholars have long noted the tendency for new immigrants to settle in urban neighborhoods characterized by poverty, substandard housing, poor schools, and high crime rates (Thomas and Znaniecki 1920; Taylor 1931; Shaw and McKay [1942] 1969; Hagan and Palloni 1998). Segregated into such neighborhoods, immigrants may turn to crime as a means to overcome blocked economic opportunities or to organized crime to gain a foothold in politics (Whyte 1943). Other writers have suggested that previously noncriminal immigrant groups may simply be “contaminated” by the criminal opportunities that abound in their neighborhoods (Lambert 1970, 284; compare Sampson and Lauritsen 1997 on the “proximity” hypothesis). According to this view, immigrant criminality is more a function of preexisting structural factors like poverty (Yeager 1997); a preponderance of young, unattached males (Taft 1936; Gurr 1989); or the availability of alcohol (see Alaniz, Cartmill, and Parker 1998) than either the biological makeup or cultural traditions of immigrant groups.

Contemporary immigrant gangs can be viewed as an alternative means of securing wealth and status in urban areas in which immigrants are concentrated and a loss of blue-collar jobs has eroded the principal basis of upward mobility used by earlier generations of immigrants (Gans 1992). Patterns of factory life associated with the industrial revolution socialized earlier waves of immigrants (e.g., Irish, Italians) and facilitated their economic stability and assimilation into American culture, thus suppressing their crime rates (Lane 1997). But the contemporary loss of industrial jobs, traceable to the recent transition of the economy from a manufacturing to a service orientation, has had drastic consequences on the legitimate (and illegitimate) opportunities in American cities (cf. Wilson 1987; Anderson 1990). Although deindustrialization impacts both immigrants and nonimmigrants, newcomers (who are both economically and culturally marginal in American society) may find the potential benefits of the “informal economy” particularly attractive (Bankston 1998; see also Vigil and Long 1990). Since the possibility of gang membership is not open to everyone and is, in fact, usually based on ethnic identity, among other things (see Sanchez-Jankowski 1991), the availability of illegitimate opportunities in gangs is one structural variable that differentially influences immigrant crime across social units such as cities or neighborhoods.

Cultural approaches

In addition to this list of structural issues, scholars have viewed cultural forces as influencing criminal involvement, and immigrant crime in particular. The

“culture of poverty” thesis—where low-income people adapt to their structural conditions in ways that perpetuate their disadvantaged condition—is one example of a cultural explanation (Lewis 1965). Thus, engaging in crime as a means of acquiring social status draws children away from schoolwork, which reduces the probability of future economic advancement. A variant of this explanation for crime, the “subculture of violence” thesis, suggests that violence can become a “normal” and expected means of dispute resolution in economically disadvantaged areas (Wolfgang and Ferracuti 1967).

Because immigrants and ethnic minorities are more likely than native whites to reside in such areas, these cultural theories would seem particularly useful. Of course, as Sampson and Lauritsen (1997) point out, the subculture of violence theory cannot explain the wide variations in violent crime rates across structurally diverse minority neighborhoods, and they conclude that structural conditions are ultimately more important than cultural traditions. Bankston (1998) also notes that the existence of gangs across a variety of disadvantaged immigrant groups implies that they are the product of similar structural conditions rather than an outcome of the cultural traditions of any specific group. Finally, it would be a mistake to attribute comparatively high rates of minor crimes, such as illegal gambling among New York City’s Puerto Rican newcomers in the 1950s, to their specific cultural traditions, since similarly disadvantaged native blacks also had high rates. As Handlin (1959, 101) points out, neither ethnic group saw gambling as a crime. Instead, the numbers game represented the American ideal of economic advancement.

Nevertheless, some writers suggest that certain types of crime are more prevalent among specific immigrant groups because of cultural traditions that are brought from the home country. Both Sutherland (1947) and Sellin (1938) argued that immigrant groups had “cultural predispositions” toward certain crimes. For example, in the 1920s, Italians had high rates of conviction for homicide but low rates of arrest for drunkenness (Sutherland and Cressey 1960). A study of Hawaii during the same period revealed that Chinese immigrants brought with them traditions of certain types of graft and gambling (Lind 1930b).

One prominent strain of cultural theory that is especially well suited to the immigration-crime relationship can be found in Sellin’s (1938) writings on “culture conflict.” Sellin (p. 21) recognized that the criminal law reflects the values of the “dominant interest groups” in society, and that the values of other social groups, particularly immigrants, were quite different. In cases in which the cultural codes of subordinate and dominant groups conflict, legal agents label as deviant the behavior of members of the subordinate classes. Nevertheless,

the criminal may be acting according to subculturally accepted norms and feel no “mental conflict” when violating the law. Sellin (p. 68) provides a classic example:

A few years ago a Sicilian father in New Jersey killed the sixteen-year-old seducer of his daughter, expressing surprise at his arrest since he had merely defended his family honor in a traditional way. In this case a mental conflict in the sociological sense did not exist.

Thus, Sellin (p. 69) distinguishes “internal” (mental) conflict that may involve guilt or shame from “external” (i.e., at the level of cultural codes) conflict that does not. As society becomes more complex through processes of differentiation (of which immigration is just one), the potential for conflict among operative “cultural codes” also increases.

Four years earlier, Sutherland (1934, 51–52) offered a similar explanation, stating that “the conflict of cultures is therefore the fundamental principle in the explanation of crime [and] . . . the more the cultural patterns conflict, the more unpredictable is the behavior of the individual.” This thesis has broad applicability to all social groups, but it clearly provides a key reason why immigrants are likely to engage in crime, perhaps suggesting that immigrants should have higher crime rates than the native population, other factors being equal.

Another body of literature in the cultural tradition has focused on the processes by which immigrants adapt to the traditions of the host country (Padilla 1980). It has long been asserted that acculturation to a new environment involves “adjustment to heterogeneous conduct norms” and this, in turn, can lead to higher crime rates (Sellin 1938, 85). Immigrant gangs, for example, usually owe as much to American cultural traditions as to those of the immigrant culture; adult Vietnamese refer to Vietnamese delinquents as “Americanized” (Bankston 1998). Immigrant gangs also form as a reaction to ethnic tensions in diverse neighborhoods; they provide physical protection from other ethnic-based gangs and maintain ethnic identities in the face of pressures for assimilation (Chin 1990; Du Phuoc Long 1996).

Other theoretical and empirical work on acculturation and crime found that delinquency among Korean-American youths varied by mode of acculturation: separation, assimilation, and marginalization. Interestingly, assimilated youths were more likely to be delinquent than those who were separated or marginalized (Lee 1998). Similarly, Stepick (1998) reports that Haitian children in South Florida adjust to extreme anti-Haitian sentiment by trying to “pass” as being African-American. Increasingly, these children are becoming part of the

criminal justice system as a result of alienation from both their Haitian background and American society (p. 120).

Social disorganization

The social disorganization perspective, although not denying the importance of cultural or structural forces, adds to the other perspectives a concern with the breakdown of community social institutions that results from social change. Bursik (1988, 521) concisely describes disorganized areas as possessing an “inability to realize the common values of their residents or solve commonly expressed problems.” In organized neighborhoods, local community institutions work together to realize community goals, protect values, and generally control the behavior of community members in ways that conform to these goals and values. Bankston (1998) notes that immigration may undermine established institutions via a process of population turnover, while it also makes agreement about common values more difficult. The implication is that when social control is weakened in this manner crime will flourish.

One early influential statement of this perspective was set forth by Thomas and Znaniecki in their five-volume work published between 1918 and 1920 titled *The Polish Peasant in Europe and America*. Thomas and Znaniecki wrote about the many social changes affecting Polish peasants in this time period, including the disorganizing influences inherent in moving from simple, homogeneous, rural areas of Poland to the complex, heterogeneous, urban areas of the United States. They defined social disorganization as “a decrease of the influence of existing social rules of behavior upon individual members of the group” (Thomas and Znaniecki 1920, 2). The effectiveness of social rules (i.e., laws) derived from the individual’s investment in them (i.e., attitudes favorable to laws). In the organized society, there was congruence between group rules and individual attitudes. Disorganization implied a gap between rules and attitudes, such that an individual did not feel bound by the rules and was free to disobey them (i.e., engage in crime). Viewed in this light, disorganization was a neutral term that suggested the possibility of social change, both positive and negative, and individual liberation from oppressive community standards, although it has generally been applied to studies of crime. One contribution to this literature is the recognition that crime not only is a function of economic (e.g., poverty) or cultural (e.g., subculture of violence) forces, but is intimately tied to the fundamental processes of social change.

Thomas and Znaniecki (1920, 82–83) describe two general types of disorganization that affect communities (and other organizations such as the family). The first, especially relevant to immigrant communities, causes a decay in solidarity

when the young generation adopts the values of the new community rather than the traditional “old world” values of the parent’s generation (see also Schneider 1995 on “cultural anomie”). One example is the influence of American schools on immigrant children—learning a new language and values generates new desires in children for experiences that the older generation cannot provide, simultaneously reducing parental and communal ability to control their behavior (see also Young 1936). The second type of disorganization occurs among members of the old generation as values are subjected to differential interpretations over time or as rules are simply not enforced, leading to “social disharmony.” For Thomas and Znaniecki, this second type of disorganization is rooted in the individual’s unique temperament and may be expressed through a lack of compliance with social rules, even though there is no explicit rejection of the rules themselves. Control is thus weakened gradually through the cumulative actions of individuals who contribute to social change, even if this is not their intention.

Although not chiefly concerned with crime, Thomas and Znaniecki ([1920] 1984) did apply the idea of disorganization to the crimes of Polish immigrants. Murder among the Polish, for example, had a very different etiology in Poland as compared with the United States. Murder among the Polish in Poland was predominantly confined to one’s own small communal group—murders of strangers were rare. The motive (e.g., revenge) in these cases was most often strongly felt and was preceded by long periods of brooding and a sense of violation of deeply held values. In contrast, murder in America by Polish immigrants was more likely to involve a victim who was a stranger or not well known to the offender and less likely to involve a concern with the seriousness of violating standards of the community. In the disorganized areas of America into which Polish immigrants settled, the social ties of the old country were weakened and community controls were loosened. Freed from traditional social controls, and subjected to social forces that influenced their lives in ways they could not control or sometimes understand, some Polish immigrants exhibited a “general nervousness” and “vague expectation of hostility” (Thomas and Znaniecki 1984, 286) that was virtually unknown in the old country. In such circumstances, murder could be provoked by seemingly trivial offenses partly because the immigrant feels the need to take individual action against affronts since:

the murderer does not feel himself backed in his dealings with the outside world by any strong social group of his own and is not conscious of being the member of a steadily organized society. His family is too weak and scattered to give him a safe social refuge . . . where he could ignore outside provocations in the feeling of his social importance and security. (Thomas and Znaniecki 1984, 286)

Thus, the weakened Polish community in America was not able to solve disputes and organize behavior as it had in the old country, and this had implications for a host of social problems, including increased crime.

Despite the voluminous work of Thomas and Znaniecki, scholars most often associate the social disorganization perspective with the writings of Shaw and McKay (1931, [1942] 1969; see also Ross 1937; Kobrin 1959) on the ecological distribution of delinquency. Shaw and McKay utilized the concept of social disorganization to great effect by using quantitative data from Chicago neighborhoods to specify the role of community disorganization in producing high crime rates, other conditions (e.g., residential poverty, ethnicity) being equal. Their most important finding was that “within the same type of social area, the foreign born and the natives, recent immigrant nationalities, and older immigrants produce very similar rates of delinquents” (Shaw and McKay 1969, 158). Or, in the words of one of their critics, “nativity and nationality have no vital relationship to juvenile delinquency” (Jonassen 1949, 613). The Chicago data suggested to Shaw and McKay (though not to Jonassen) that certain areas had consistently high rates of delinquency, regardless of which immigrant groups lived there, and that as immigrant groups moved out of these areas and into better neighborhoods, their juvenile delinquency rates fell as well.

Inspired by Thomas and Znaniecki, the theoretical explanation suggested by these patterns was that neighborhoods characterized by “disorganizing” factors such as high population turnover and ethnic heterogeneity will be less likely than other neighborhoods to control the behavior of their inhabitants. According to this view, immigrants will have high crime rates only when they settle in disorganized neighborhoods, not because of biological factors or criminal cultural traditions. Thus, Lind (1930a, 1930b) stresses the value of distinguishing homogeneous but poor “ghettos” from heterogeneous, disorganized, and poor “slums.” According to this view, crime might flourish in slums but not in ghettos, even though both are characterized by economic deprivation and other deleterious social conditions, because ghetto residents exert a degree of control over neighbors that is missing in disorganized slums (Lind 1930a). However, recent work on nonimmigrant black ghettos has found that homogeneous areas are not better organized for social control (Anderson 1990) and suffer from the concentration of multiple social problems (Sampson and Wilson 1995). Contemporary studies on immigrants in this tradition are lacking.

Recent theoretical work by Sampson and Lauritsen (1997) has attempted to demonstrate how macrosocial and local community-level structural forces can be combined to improve on the classic disorganization framework. Although this work developed from an attempt to explain black-white crime differences as well as the wide variation in black crime rates across structurally different

community areas, the theory can also advance our knowledge of the link between immigration and crime. Sampson and Lauritsen suggest that powerful factors (e.g., segregation, housing discrimination, structural transformation of the economy) coincide with local community-level factors (e.g., residential turnover, concentrated poverty, family disruption) to impede the social organization of inner cities (p. 340; see also Sampson and Wilson 1995). A deeper understanding of the interaction effects of these variables would enhance existing theories by better incorporating the role of the “massive social change” (Sampson and Lauritsen 1997, 340) experienced by the mostly black residents in U.S. inner cities in the 1970s and 1980s. Since the post-1965 immigration wave brought newcomers into these same structural conditions, we might expect high rates of immigrant crime during this time period. This question is the subject of the next section on empirical studies of immigration and crime.

Empirical Studies

There have been two major waves of immigration in the 20th century. The first consisted mainly of Europeans and Canadians and lasted until the mid-1920s, when congressional acts ended the flow of large numbers of immigrants into this country. The second, referred to as the “new immigration,” began after 1965, peaked in the early 1990s, and was dominated by Afro-Caribbeans, Asians, and Latin Americans (Suarez-Orozco 1998; Hagan and Palloni 1998). Mexico is currently the largest single source of immigrants, both legal and illegal (Baker et al. 1998). In the following section, we consider some of the major studies of immigration and crime undertaken during both waves.

Early studies

In a recent historical study, Roger Lane (1997, 298) concluded that “homicide in the modern world has been mostly an irrationally impulsive crime, committed by young men, especially poor and aimless young men energized by frustration and anger.” The same could be said about other crimes. Because immigration brings a disproportionate number of young males into the host country, we might expect immigrants to exhibit higher crime rates than the native population. In some cases, this has been the case (Gurr 1989; Monkkonen 1989). Beyond this population issue, each of the theoretical perspectives discussed previously offers compelling reasons why immigrants should have high crime rates: They usually settle in high-poverty, high-crime, disorganized communities and encounter problems of adjustment that native groups do not experience. Also, many immigrants move from rural areas into urban areas, and this also exerts a disorganizing influence on communal and familial structures (Young 1936). In fact, urban growth and immigration usually occur simultaneously and increases

in crime are often more a function of urbanization than any other factor (Handlin 1959). Yet the major finding of a century of research on immigration and crime is that immigrants display tremendous variations over time and space in their criminal involvement and, contrary to popular opinion, nearly always exhibit lower crime rates than native groups (Hagan and Palloni 1998; Tonry 1997; Ferracuti 1968; Sellin 1938).

The earliest studies on crime among the first wave of immigrants, which ended in 1924, were based on evidence that was uneven at best (Tonry 1997, 21). These studies suggested that newcomers were less likely to be involved in crime than the native born. A special report issued by the Industrial Commission of 1901 found that "foreign-born whites were less criminal than native whites," while the 1911 Immigration Commission concluded that "immigration has not increased the volume of crime" and that the presence of immigrants may have even suppressed criminal activity (Tonry 1997, 21). A review of other early immigrant-crime studies discovered that, contrary to stereotypes, most researchers did not find first-wave immigrants to be crime prone (McCord 1995), although results did vary by city (e.g., immigrants in Boston, but not in Chicago, were disproportionately involved in crime). These studies generally found that children of immigrants had crime rates higher than their immigrant parents but not higher than native-born children. This suggests that the acculturation to American life of the second generation of immigrants, and not the assumed "criminal traditions" of immigrant groups, was related to immigrant crime rates (Hagan and Palloni 1998; Sellin 1938; Sutherland 1934). Acculturation was apparently weakening the impact of traditional social controls in immigrant communities.

Even so, studies of the first wave of immigration support the conclusion that immigrants were not as highly involved in crime as natives (Abbott 1915; Lind 1930b; Taft 1936; Ferracuti 1968). A prominent report published in 1931 by the National Commission on Law Observance and Enforcement, popularly known as the Wickersham Report, noted that immigrants had lower overall crime rates than nonimmigrants, although some groups appeared disproportionately involved in specific types of crime. Mexicans in one study, for example, displayed higher rates of arrest for some violent crimes than native whites (though lower than native blacks; see Bowler 1931, 119). However, as Taylor (1931) and later Sellin (1938, 76) pointed out, these rates are "untrustworthy" because reliable Mexican population estimates were not available because of the migratory nature of that group, a situation made worse by the fact that the 1930 census figures were not yet available (Taylor 1931).

Immigrant rates were untrustworthy for other reasons as well. Another author of the 1931 report discussed ways in which prejudice against Mexicans by

criminal justice personnel worked to inflate their arrest rates (Warnshuis 1931). For example, police in a community with a large Mexican presence expressed the belief that most crimes were committed by Mexicans, while an examination of arrests revealed that only 4 Mexicans out of 252 total persons arrested were booked in 1 month; 3 of these were for “disorderly conduct,” and none were convicted. In terms of official statistics, police prejudice had practical consequences when serious crimes occurred: Police would sometimes arrest “all the Mexicans they could find” (p. 283), artificially inflating Mexican crime rates.

Despite the limitations of the Mexican crime data, Taylor (1931) was able to draw several conclusions. First, the number of Mexican crimes committed was about what could be expected by the number of Mexicans in the population and the crime rates were similar to those of other groups. Second, patterns of criminal arrest varied considerably across cities and were shaped by a host of social factors, including poverty and the age and sex distributions of the immigrant population. Taylor (p. 235) also discovered that Mexican criminal involvement displayed “interesting diversity within the same locality,” suggesting the need to examine structural factors differentially affecting immigrants in socially meaningful areas such as neighborhoods, rather than in larger political divisions such as cities and States. In short, there was no single conclusion that could be drawn about “Mexican crime rates” independent of the local community context.

This last point was investigated by Lind (1930a, 1930b) in work on immigration and crime in the ethnically diverse city of Honolulu, Hawaii. Following proponents of the Chicago school of sociology like Robert Park and Louis Wirth, Lind (1930a, 206–207) stressed the distinction between “slums”—ethnically diverse, unstable, and poor neighborhoods—and “ghettos,” which were also economically depressed but characterized by a stable, organized, and racially homogenous group of residents (see also Whyte 1943 on “rooming house” verses “settlement” districts). Lind found that due to neighborhood heterogeneity and instability, groups in slums had multiple moral codes and were less effective in organizing families and community organizations to control the behavior of residents who were members of that group. Thus, delinquency was rare in poor but stable Japanese neighborhoods and high among native

Scholarly research and public concern about immigration and crime practically disappeared in the middle third of the 20th century. This is not surprising because immigration was low during this time period and large segments (e.g., Italians, Irish) of the first wave had been assimilated into American society.

Another study found that immigration was not related to youth violence in California, while alcohol availability was an important influence on serious crime among young males in three cities with a heavy Latino population. Finally, a study of Puerto Rican newcomers found that those living in New York City had high rates of homicide, while Puerto Ricans living elsewhere had rates comparable to native whites.

Hawaiians residing in economically better off, but disorganized, areas (Lind 1930b). In addition, Lind (1930a, 209) documented that Japanese delinquency rates also varied by the degree of neighborhood segregation and population concentration. Such findings provided empirical support for the argument that immigrant crime is a function of generic processes (i.e., disorganization) associated with urban living rather than the cultural traditions or predispositions of immigrants (see also Shaw and McKay 1969).

Other research found that compared with native groups, some immigrant groups were able to resist the disorganizing effects of slum areas to a higher degree than native groups. One study showed that although Seattle's Japanese immigrants lived in an economically deprived, high-crime, disorganized area, their "strong family and community organization" was able to keep their children's delinquency rates low (Hayner 1933, 319). This is consistent with results reported by Taft (1936, 736) showing that immigrants usually displayed lower crime rates than nonimmigrants and that variations could be explained by some combination of "adverse conditions" found in high-crime areas and the insulating effect of the "cultural values which different national groups bring." Von Hentig (1945, 793; contra Glueck and Glueck 1930) reports similar findings: Descendants of native-born groups were much more involved in serious crime than descendants of immigrants or of mixed parentage, though there were "vast diversities by States." Again, some combination

of ecological conditions and cultural factors seemed important for explaining the involvement, or lack thereof, of immigrants in crime.

Contemporary studies

Scholarly research and public concern about immigration and crime practically disappeared in the middle third of the 20th century (Hagan and Palloni 1998). This is not surprising because immigration was low during this time period and large segments (e.g., Italians, Irish) of the first wave had been assimilated into American society (Lane 1997). But the post-1965 wave of immigration (largely Latino, Asian, and Afro-Caribbean) has generated renewed interest in the topic, in part because the arrival of these immigrants coincided with the rise in crime rates in this country during the late 1960s and 1970s.

Some writers have suggested that immigrant criminality was becoming an increasingly serious problem in the 1990s, as evidenced by the increase in prosecutions in U.S. district courts of noncitizens from 1984 to 1994 (3,462 cases to 10,352 cases, respectively; see Marshall 1997). Yet this finding does not take into account the tremendous increase in immigration over this time period and is largely the result of increased prosecution for drug offenses as well as for immigration offenses to which natives are not subject. As we discuss in the following section, public opinion continues to associate immigrants with crime, so it is important to review recent studies that have investigated this relationship.

The 1994 U.S. Commission on Immigration Reform compared crime in cities along the U.S.-Mexico border with nonborder cities in order to assess the impact of Mexican immigrants on crime rates. The Commission concluded that crime rates in border cities such as El Paso, Texas, were generally lower (in some cases much lower) than rates in nonborder cities. In addition to city rate comparisons, regression analysis revealed that "crime is lower on average in border areas than in other U.S. cities when the characteristics of the urban population are held constant" (1994, 20). A followup study conducted a more direct statistical test of the effect of immigration on levels of crime and found "no consistent or compelling evidence at the SMSA [Standard Metropolitan Statistical Area] level that immigration causes crime" (Hagan and Palloni 1998, 380).

Much of the recent work on immigration and crime has focused on gangs (see Bankston 1998; Marshall 1997). This is not surprising, since new immigrants often settle in urban areas characterized by a high level of gang activity, and many immigrant gangs form as a means of protection from these existing threats (Chin 1990). Although there have been numerous studies of specific immigrant gangs (cf. Du Phuoc Long 1996), there has been no research that systematically compares the level of immigrant involvement versus native involvement in gangs or suggests reasons to suspect that immigration increases gang activity (Bankston 1998).

Post-1965 studies of nongang criminal involvement of specific immigrant or ethnic groups have been rare (Martinez and Lee 1999). The studies that have been conducted tend to agree with research on the first wave: Immigrants are not disproportionately involved in crime and often are much less involved than native groups. For example, research on homicide in San Antonio found that homicide rates among Mexican males fell between those of native whites and native-born blacks and that homicide remained concentrated in poor areas of the city, regardless of whether the residents were black or Mexican over the 1940 through 1980 period (Bradshaw et al. 1998). Another study found that immigration was not related to youth violence in California, while alcohol availability was an important influence on serious crime among young males in

In the small number of studies providing empirical evidence, immigrants are generally less involved in crime than similarly situated groups, despite the wealth of prominent criminological theories that provide good reasons why this should not be the case.

three cities with a heavy Latino population (Alaniz, Cartmill, and Parker 1998). Finally, a study of Puerto Rican newcomers found that those living in New York City had high rates of homicide, while Puerto Ricans living elsewhere had rates comparable to native whites (Rosenwaike and Hempstead 1990).

A number of studies have examined homicide among several prominent ethnic groups in Miami. Although Mariel refugees were often portrayed by the media as high-rate killers, the empirical evidence demonstrated that they were rarely overrepresented as either victims or offenders, and in fact, after a short time, were much less likely to offend than Miami's established Cubans (Martinez 1997a). In addition, despite a constant influx of Latino immigrants in the 1980s, Miami's homicide rates continued to decline (Martinez 1997b). Finally, Martinez and Lee (1998) found that Miami's Haitians and Latinos were underrepresented in homicide relative to group size, while African-Americans were over-

represented, and in some cases the rate of homicide among the two immigrant groups was *lower* than that of non-Latino whites (Anglos).

Consistent with earlier studies, the criminal involvement of immigrant groups varies considerably in different cities. A good example of this variation is provided in a study of Latino homicide among El Paso's Mexicans and Miami's Cubans (Lee, Martinez, and Rodriguez 2000). Despite the two cities' similar structural characteristics (e.g., employment, poverty), Miami's Latino homicide rate was almost three times that of El Paso. In addition to city-specific characteristics such as Miami's older population, greater income inequality (see Martinez 1996 for a discussion of absolute deprivation versus relative deprivation among Latinos), and possibly greater availability of guns, other local conditions shaped the comparatively high Cuban homicide rate. For example, Cubans settled in a more violent area of the country (south Florida) than did Latinos in El Paso, and this regional context may shape each group's involvement in homicide. Wilbanks (1984; see also Epstein and Greene 1993), demonstrated that Miami's homicide trends mirror those for south Florida generally, and that this area experienced a sharp rise in homicides *prior to* the arrival of thousands of Cuban refugees in the Mariel boatlift of 1980. Thus, Miami's Latinos lived in a location experiencing higher levels of violence than El Paso's Latinos.

Just as important differences were revealed by the experience of two groups of Latinos described in the preceding research, other studies have also examined within-group differences among ethnic groups (see Hawkins 1999 for a similar strategy). Martinez and Lee (2000) investigated Afro-Caribbean homicides in Miami and found that Mariel Cuban, Haitian, and Jamaican immigrants were generally less involved in homicide than natives. Comparing the early 1980s, when these groups first began arriving in Miami in large numbers, to the late 1990s, the authors noted a strong pattern of declining violence, especially for Jamaicans and Mariels, while Haitians continuously maintained a low overall rate. As these immigrant groups grew in size and had a lower proportion of young males, homicide rates rapidly declined. This finding suggests that, contrary to key propositions of social disorganization theory, rapid immigration may not create disorganized communities but may instead stabilize neighborhoods through the creation of new social and economic institutions (see also Portes and Stepick 1993).

The general conclusions of recent research on immigration and crime echoes themes found in earlier studies. In the small number of studies providing empirical evidence, immigrants are generally less involved in crime than similarly situated groups, despite the wealth of prominent criminological theories that provide good reasons why this should not be the case (e.g., residence in disorganized neighborhoods, acculturation difficulties, conflicts between cultural codes). Furthermore, immigrant experiences vary greatly with local conditions, as illustrated by the study of Cubans in Miami and Mexicans in El Paso, and it is likely that these conditions shape criminal involvement to a larger degree than the cultural traditions of the groups themselves. We now turn to a review of persistent public opinions about immigrants and crime.

Public Opinion on Immigration and Crime

Rita Simon (1985, 1987, 1993) points out that, regardless of the time period, public opinion has almost always been negative on the issue of whether additional immigrants should be permitted to enter this country (see also Espenshade and Belanger 1998). In addition, the most recent immigrants are almost always viewed unfavorably, although public opinion eventually improves with the passage of time (Roper Reports 1995). According to Simon (1987, 47), older ethnic communities are viewed more positively than recent arrivals, even if the earlier communities were initially disliked.

For example, the Chinese and Japanese are viewed more favorably today in public opinion polls than they were in the 1920s, although they were once

Articles in other popular magazines also expressed the low public opinion in which immigrants were held. One 1923 issue of the Saturday Evening Post viewed immigrants from southeastern Europe as the "dullest and dumbest people in Europe," while another from the same year quoted eugenicist Harry Laughlin as saying "If America doesn't keep out the queer alien mongrelized people of Southern and Eastern Europe, her crop of citizens will eventually be dwarfed and mongrelized in turn."

widely subjected to discriminatory legislation and prejudicial public attitudes (Abbott 1931). Similarly, opinion was decidedly against Irish, Italians, and Poles in the 1920s, but white ethnic groups are usually better regarded today, at least in some recent surveys. A 1985 survey showed that 82 eminent social scientists believe, like most Americans for the past century and a half, that the current group of immigrants (mostly Latinos) is somehow different than previous groups: They are thought less likely to assimilate and especially dangerous to cultural values and institutions (Simon 1993).

In addition to this temporal issue, opinions about immigrants are not uniformly distributed across social groups—persons with advanced education, prestigious jobs, and higher incomes hold more favorable opinions of all immigrants regardless of country of origin (Simon 1987), although some surveys have shown that compared with other groups, blacks and Latinos hold immigrants in high esteem (Espenshade and Belanger 1998). However, small wording changes in these surveys make a big difference in the attitudes of respondents. For example, immigrants who have lived in the United States for at least 5 years are viewed much more favorably than recent arrivals. It is also telling that in surveys that place concerns about immigration in a wider context of social issues, immigration ranks much lower than other issues such as crime and jobs as well as "don't know" responses (Espenshade and Belanger 1998).

To place the current anti-immigrant sentiment in context, it is informative to examine trends in opinions about immigration and crime throughout the 20th century.¹ As Ferracuti (1968, 190; see also Short 1997; Abbott 1931) points out, in the first half of the 20th century, "popular opinion often expressed the view that migrants were responsible for a large fraction of the crime rate," despite considerable empirical evidence that they were not. Statements like the following from a turn-of-the-century New York City police commissioner were typical: "[S]omething like 85 out of one hundred of our criminals should be found to be of exotic origin" (Simon 1985, 70–71). This commissioner viewed Italians as particularly dangerous "malefactors"

(Simon 1985, 71) and promoted the view that the French and Belgians organized white slavery rackets.

The idea of criminal immigrants was not a product of the 20th century; a series of articles in the *New York Times* published in 1880 was also concerned with criminal Italians, a particularly “clannish race,” and the prototypical “bad Irish boy [who was] about as unwholesome a product as was ever reared in any body politic” (Simon 1985, 186). Note also that the 1892 Democratic Party platform nodded approvingly at legislation designed to keep the United States from “being used as a dumping ground for known criminals” from Europe and China (Simon 1985, 18). Such views had long been reflected in scholarly writings as well. For example, an article by William Jeffrey in an 1893 issue of the *Journal of Political Economy* also blamed immigrants for increasing crime rates (Simon 1985).

This image appeared in prominent periodicals throughout the first wave of immigration. A 1915 editorial in *North American Review* called for a restriction of immigration on the grounds of the “criminal and economic worthlessness” of southern European immigrants (Simon 1985, 71). Articles in other popular magazines also expressed the low public opinion in which immigrants were held. One 1923 issue of the *Saturday Evening Post* viewed immigrants from southeastern Europe (e.g., Italy, Greece) as the “dullest and dumbest people in Europe,” while another from the same year quoted eugenicist Harry Laughlin as saying “If America doesn’t keep out the queer alien mongrelized people of Southern and Eastern Europe, her crop of citizens will eventually be dwarfed and mongrelized in turn” (Simon 1985, 85). The assumed criminal nature of immigrants is a common theme in these writings, with authors claiming that immigrants were filling penitentiaries and insane asylums faster than the native born. During the 1920s, Italians, Jews, Poles, Russians, Greeks, and others were commonly portrayed as criminals.

Contemporary anti-immigrant sentiment is often promoted by organized interest groups that accuse Third World nations of exporting their excessive numbers to the United States (Simon 1993, 69). And as in the past (see Sellin 1938), current legislation—such as California’s Proposition 187 and the U.S. Congress’ 1996 Immigration Reform bill—has not relied on scholarly research, even though it has been justified on the grounds that it will stem the tide of “criminal aliens,” who are a growing presence in the criminal justice system (U.S. Commission on Immigration Reform 1994; Scalia 1996). This imagery has profound consequences for recent immigrants who must confront these enduring negative stereotypes, are singled out for discrimination, and are consistently viewed in public opinion polls as burdens to society (Simon 1987; Roper Reports 1995).

One consequence of prejudicial attitudes about immigrants can be seen in the rise in reported hate crimes against Asian-Americans that occurred in some communities in the 1980s (Zinsmeister 1987). Citizens in areas in which Asian immigrants were settling believed that these immigrants “come from jungle communities,” eat dogs, and represent unfair labor competition because they work “day and night” (Zinsmeister 1987, 8). Gore Vidal echoed this last concern in a 1986 article in the *Nation*, claiming that unless the United States and Canada cooperated with each other and limited the number of Asian newcomers, Americans would end up as “mere entertainment” for Asians (p. 350). These ideas, when added to the traditional allegation that immigrants are a highly criminal population, facilitate a resentment against immigrants that may increase the probability of hate crimes.

Public opinion and immigrant homicide in three cities

As a point of departure, we focus on homicide victim rates, not offending rates, in the following section. Although much of our discussion has centered on offender motivation, the immigration-crime link should be evident in the following analyses of homicide victim rates given the closeness of the victim and offender relationship in most cases. The Federal Bureau of Investigation’s 1995 Uniform Crime Report (UCR) notes that in 75 percent of homicide cases cleared with an arrest, the victim and offender had *some* type of prior relationship (spouse, family member, lover, friend, neighbor) or previous contact such as an acquaintance or coworker (U.S. Department of Justice, Federal Bureau of Investigation 1997, table 2.12). Thus, in most cases, the “stranger element” is absent even after considering the proportion of unknown offenders, which could fall in any category of familiarity or individual characteristic (age, race, gender). Furthermore, the vast majority of all homicides were intraracial (white on white, black on black) and speaks to neighborhood residential patterns and segregation that have long been part of American society. Most persons tend to live in areas in which other residents have similar attributes, including race and ethnicity.

In addition, historical and contemporary studies also report that many killings were victim precipitated and that the event initially arose out of an argument (as one example) that turned lethal (Wolfgang 1958; Martinez and Lee 1998). The closeness of this relationship is further illustrated in a recent city-level homicide study of black and white victim rates. Ousey (1999, 410) reports that the effects of structural conditions on homicide victim and arrest rates are substantially similar and provide the same conclusions. This is not surprising

given the spatial proximity between victims and offenders, most of whom reside in the same neighborhood and share points of economic comparison (Anderson 1990). In fact, both are also products of communities weakened by a host of social problems that impede the ability of institutions to maintain order and provide opportunities to those most in need and typically more active in crime in general and violence specifically.

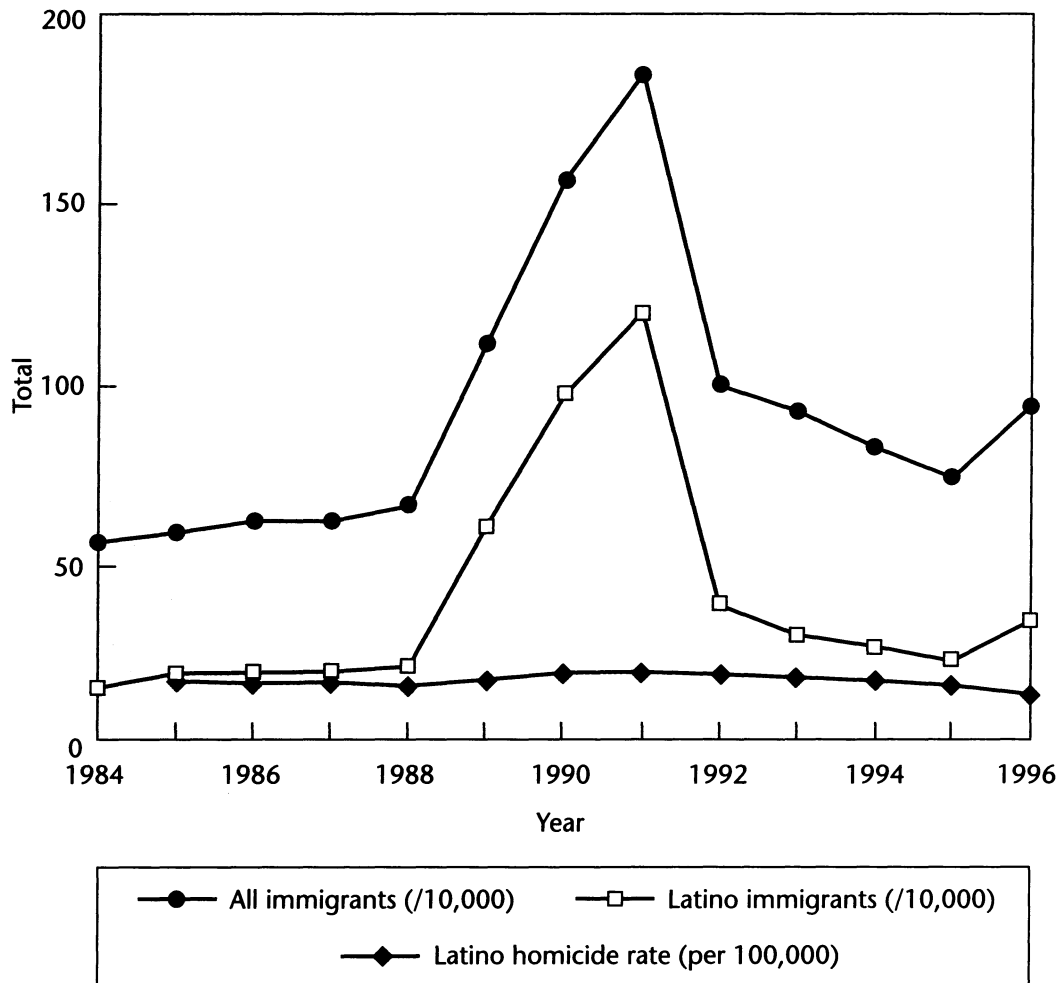
Finally, data issues also encourage us to focus on victim data. Homicides are rare events relative to any other type of violent crime (e.g., armed robbery, aggravated assault). Disaggregating these already scarce cases by ethnicity thins an already shallow pool even more, encouraging researchers to use all available homicide victim incidents. Furthermore, to the best of our knowledge, no large-scale datasets are available or, if available, are not fully complete that break down offending behavior for Latinos. Critics might suggest that our findings in the following section are city specific. We admit there is a chance that our findings might differ from those of others, but again, most of our cases involve members of the same group, and in all instances, the contours of victim and offender data followed each other closely. Therefore, victimization rates represent a valuable, albeit not entirely satisfactory, proxy for group-specific offending behavior.

Despite claims by pundits and writers that high levels of crime are an unavoidable product of immigration, scholars rarely produce any systematic evidence of this recently reemerging social problem (Beck 1996; Hagan and Palloni 1998; Sampson and Lauritsen 1997). As Hagan and Palloni note, because immigration adds to the country's total population—and especially the population of young, unattached males—it will also likely increase the absolute volume of crime. The key question is whether immigrants contribute a disproportionate amount of crime beyond what we would expect from native populations with similar demographic characteristics. As exhibit 1 shows, the recent wave of immigrants (predominantly Latino) appears not to have affected rates of Latino homicide.²

Because immigration adds to the country's total population—and especially the population of young, unattached males—it will also likely increase the absolute volume of crime. The key question is whether immigrants contribute a disproportionate amount of crime beyond what we would expect from native populations with similar demographic characteristics.

Although theory and popular wisdom suggest that immigrants should be disproportionately involved in crime, the trends reported in exhibit 1 show that Latino homicide rates remained remarkably stable despite a massive increase in Latino immigrants in the early 1990s. Similar findings showing no systematic relationship between immigration and crime rates have been reported for the early 20th-century wave of immigration as well (Hagan and Palloni 1998, 369). In the final section of this essay, we explore the relationship between public opinion, local context, and immigrant crime by reporting previously unpublished group-specific homicide victim data.

Exhibit 1. Total and Latino immigration counts with the national Latino homicide victim rate



Sources: Immigration figures are reported by the U.S. Department of Justice, Immigration and Naturalization Service (1997, 1987); homicide rates are based on data from the U.S. Department of Health and Human Services, National Center for Health Statistics (1998).

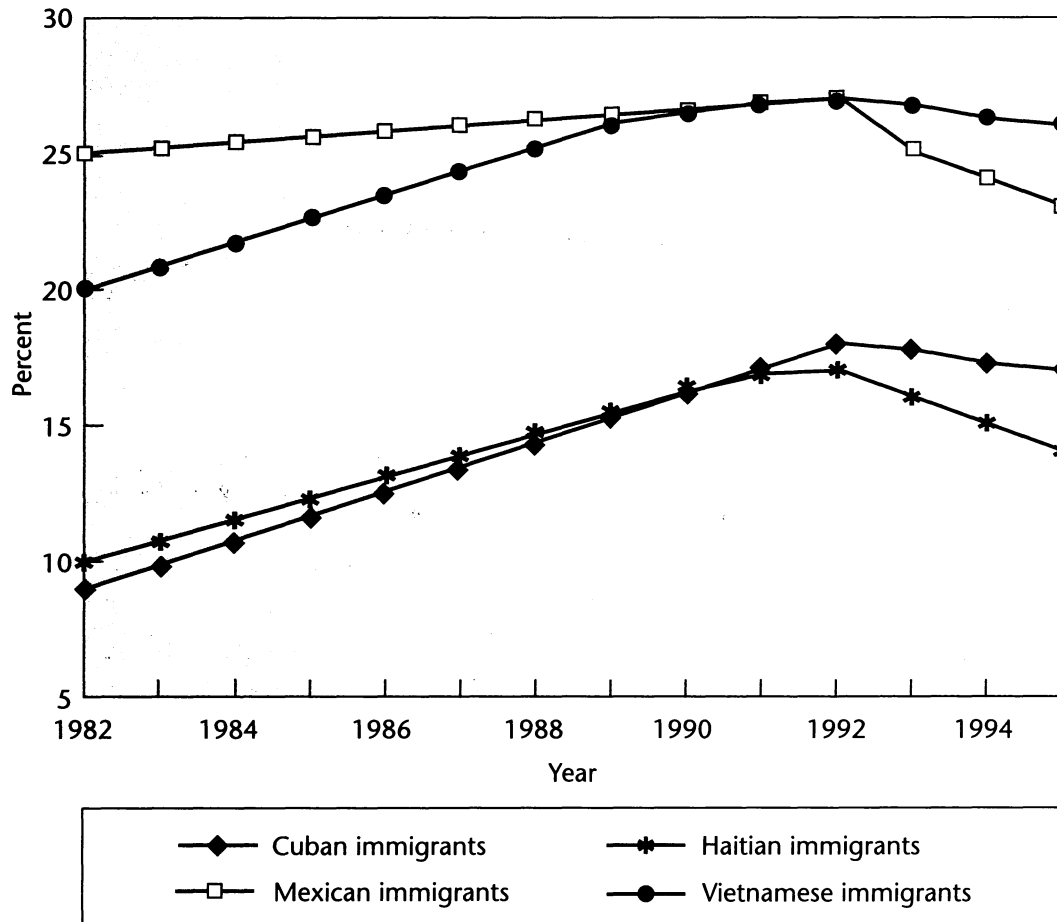
In this section, we present empirical findings for the latest available time period from an ongoing study of immigrant homicide victimization in three cities, El Paso, Miami, and San Diego. Little evidence exists that violence among Latinos in these cities, almost one-third foreign born, is persistently and systematically influenced by high levels of immigration. Despite this finding, public opinion has remained negative on the issue of whether specific immigrant groups have “been a good thing for the country,” which suggests that these immigrant groups face widespread prejudice and, presumably, difficulties adjusting to American society (Roper Reports 1995). As exhibit 2 shows, only a small percentage of Americans (in no case more than 27 percent) hold favorable opinions of the immigrants listed. Although positive attitudes toward Mexicans and Vietnamese are twice as high as those about Cubans and Haitians, they nevertheless still are expressed by a relatively small proportion of the U.S. population. By comparison, European immigrants (i.e., English, Irish, and others from the first wave of immigration) are generally viewed at least twice as favorably as the recent immigrant groups. For example, 45 percent of respondents in 1995 rated the Irish favorably (see Roper Reports 1995).

Before turning to an examination of group-specific homicide rates, as these might be influenced by unfavorable public attitudes, we first present total homicide rates for the three cities involved. We have commented throughout this essay on the importance of local conditions in shaping immigrant crime, and it is important to place the homicide involvement of immigrant groups in their local context. Since victim data are more fully complete than offender information, and given that roughly 20 to 25 percent of homicide cases are neither cleared with an arrest nor have an identified assailant, victim rates are used as proxies for homicides. Offender rates, at least in these cities, follow the same racial and ethnic contours of victimization data, allowing us to remain reasonably confident that our argument applies to all homicide cases.

As exhibit 3 shows, homicide rates per 100,000 persons in Miami are much higher than in San Diego and El Paso, so we would expect that this finding would shape immigrant homicide. Therefore, in the exhibits that follow, the homicide rates of immigrant groups will be compared with relevant local and national rates. In many of the exhibits, immigrant rates mirror both city-specific and national trends.³

The Mariel contribution to local homicide was concentrated for a few years and then greatly declined, dropping below Miami's total and Latino rates and even below national rates for cities of Miami's size.

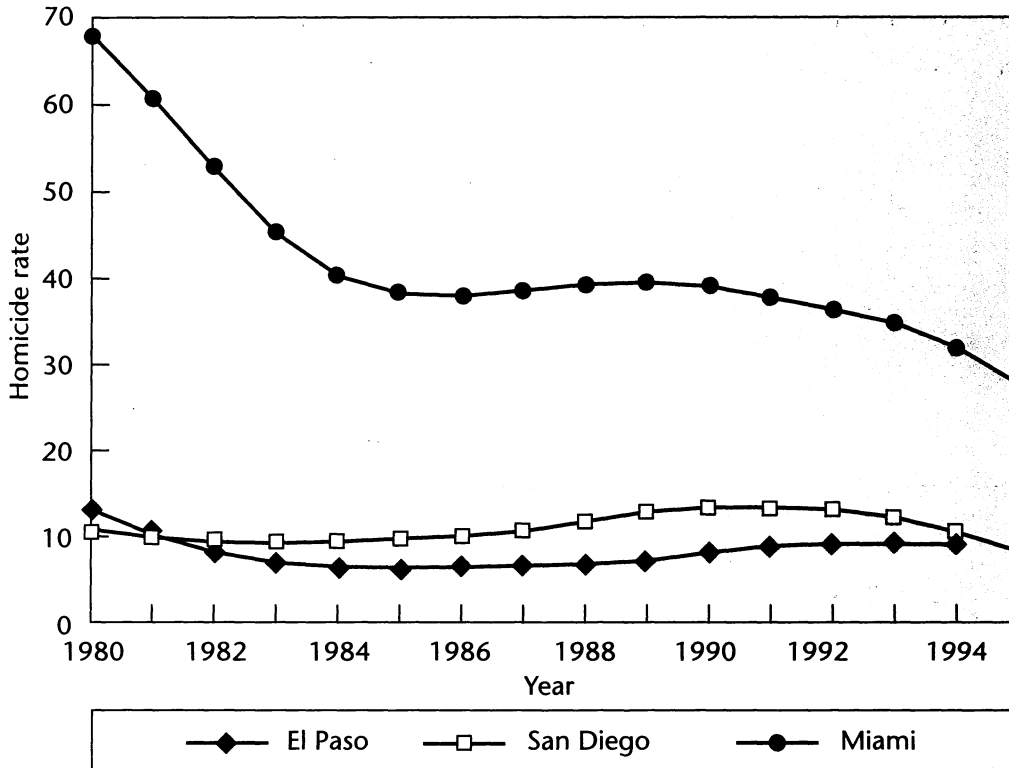
Exhibit 2. Percent of U.S. population sample who believe selected immigrant groups have been a "good thing for the country"



Source: Roper Reports 1995, 113-114.

There are probably some unique instances for Latinos and others in which changes in public attitudes and victimization rates shift over time. Take, for example, the highly publicized 1980 Mariel boatlift in which almost 125,000 people fled Cuba, with most ending up in south Florida (see Portes and Stepick 1993). The popular media linked these refugees to already record-high crime rates in Miami, labeled them as *escorias*, or scum, released from Cuban prisons, and generated a great deal of negative publicity about the group as a whole (see Aguirre, Saenz, and James 1997). As we see in exhibit 4, the Mariel homicide victim rate did exceed the Miami city total from 1980 to 1986. However, the Mariel Cubans never surpassed the African-American level of victimization

Exhibit 3. Total homicide victim rates for three cities

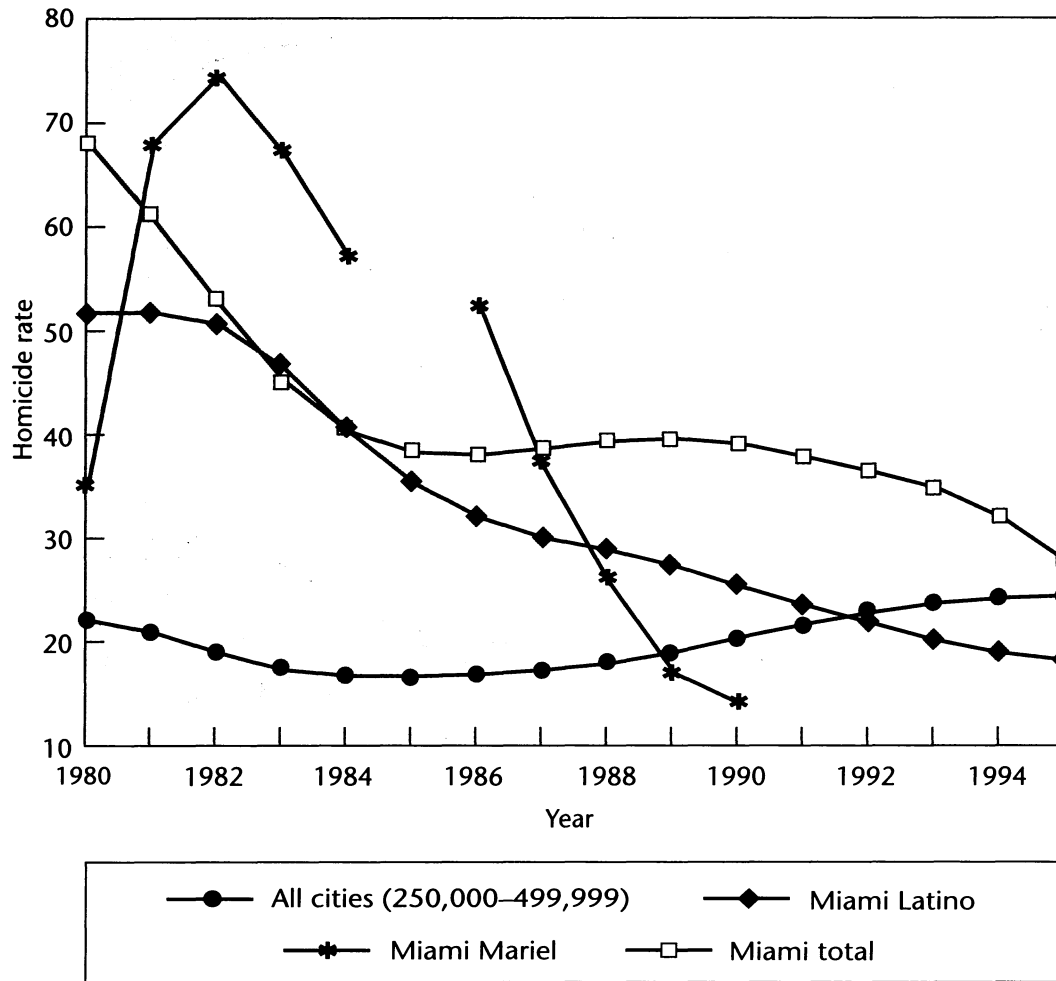


Sources: City of El Paso Police Department homicide investigations records 1980–95; City of Miami Police Department homicide investigations records 1980–95; City of San Diego Police Department homicide investigations records 1980–95. Population estimates are based on data from the U.S. Bureau of the Census (1990).

and apparently landed in Miami during an overall period of urban strife (see Martinez 1997 for data collection material). This is not to suggest that the Mariels were *not* overinvolved in crime. In fact, they did contribute, like others, to the high crime levels in Miami, but at the same time they were not the persistent and high-crime-prone immigrants portrayed in the media. The Mariel contribution to local homicide was concentrated for a few years and then greatly declined, dropping below Miami’s total and Latino rates and even below national rates for cities of Miami’s size.

The negative attitudes toward Cubans persisted much longer than the initial negative publicity. Using the work of Portes and Stepick (1993) as a starting point, we note that the percentage of the national population agreeing that “Cubans were a

Exhibit 4. Miami's Mariel homicide victim rates in local and national context

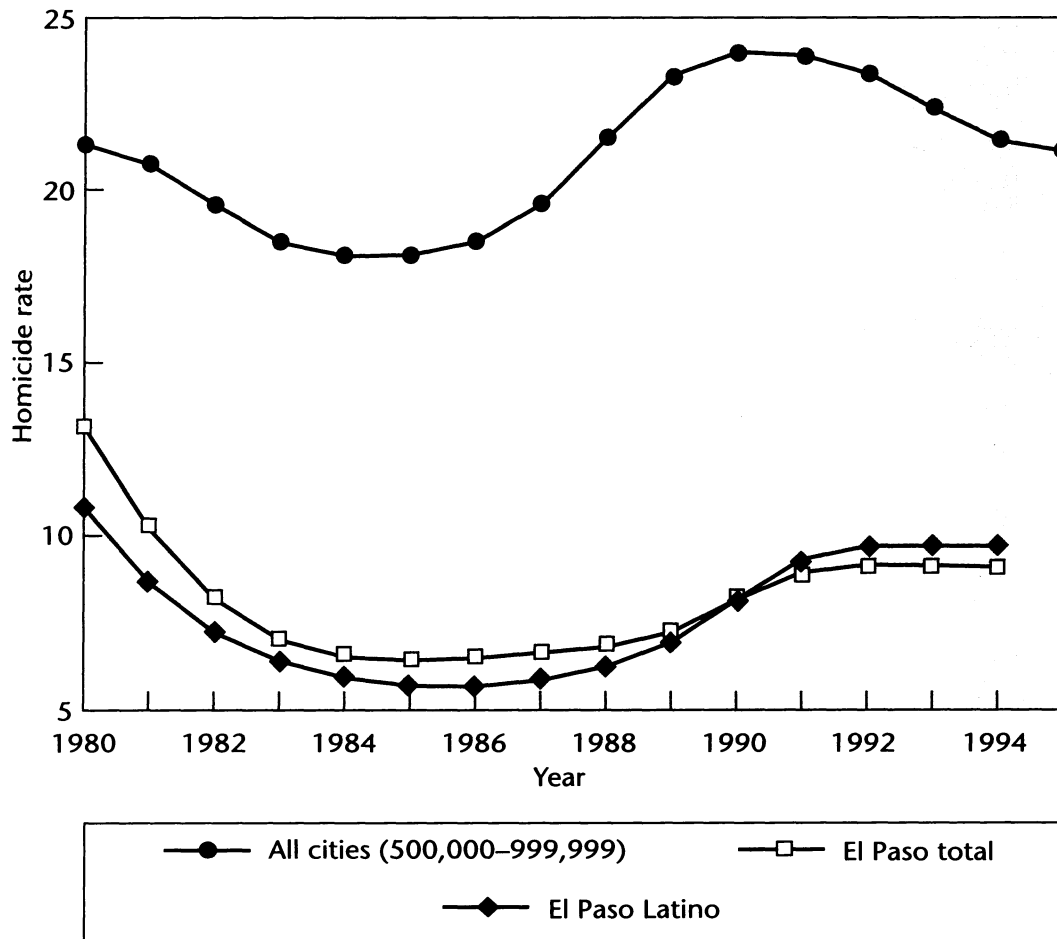


Sources: City of Miami Police Department homicide investigations records 1980-95. Population estimates are based on data from the U.S. Bureau of the Census (1990); population estimates for Mariels are based on data discussed in Portes, Clark, and Manning (1985); homicide rates for all cities are based on data from the U.S. Department of Justice, Federal Bureau of Investigation (1980-95).

good thing for the United States” was below 10 percent and rose only to about 17 percent for Cubans in 1995, according to the latest available Roper Reports (see exhibit 2). This was despite the substantial decline of Mariel violence in Miami, where most of the refugees settled.

The same negative attitudes hold true in cities on the U.S.-Mexico border. Public opinion toward Mexicans never reflects the persistently low Latino (Mexican) victim rates in the two largest border cities—El Paso and San Diego.

Exhibit 5. El Paso's Latino homicide victim rates in local and national context

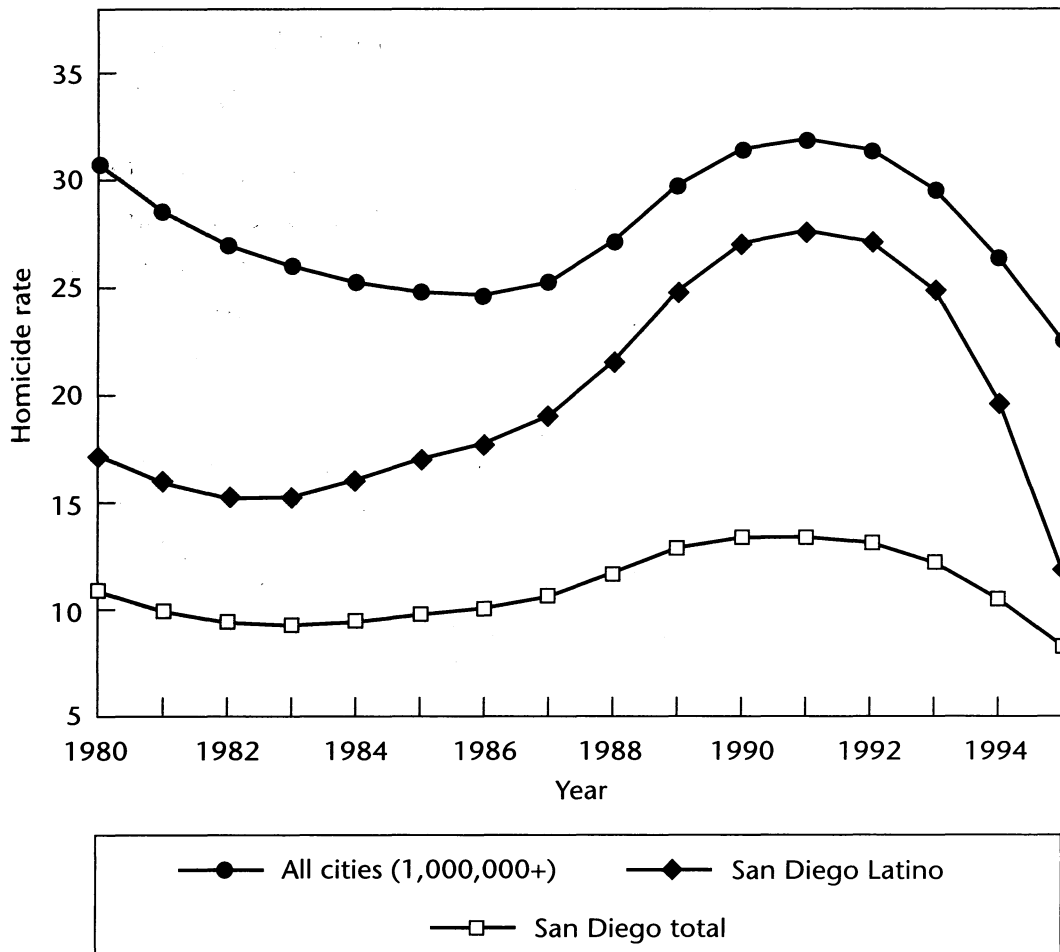


Sources: City of El Paso Police Department homicide investigations records 1980-95. Population estimates are based on data from the U.S. Bureau of the Census (1990); homicide rates for all cities are based on data from the U.S. Department of Justice, Federal Bureau of Investigation (1980-95).

The homicide rate in these two cities never approached that of other cities of similar size (see exhibits 5 and 6). Exhibit 2 shows how national attitudes toward Mexicans remained flat, then actually declined, notwithstanding the low Mexican-origin homicide rates.

The connection between low victim rates and public perception becomes most apparent in the case of Miami's Haitians, as shown in exhibit 7. Miami is not only a major destination for Afro-Caribbeans, it is home to the second largest Haitian community in the United States. Yet, again, public attitudes toward

Exhibit 6. San Diego's Latino homicide victim rates in local and national context

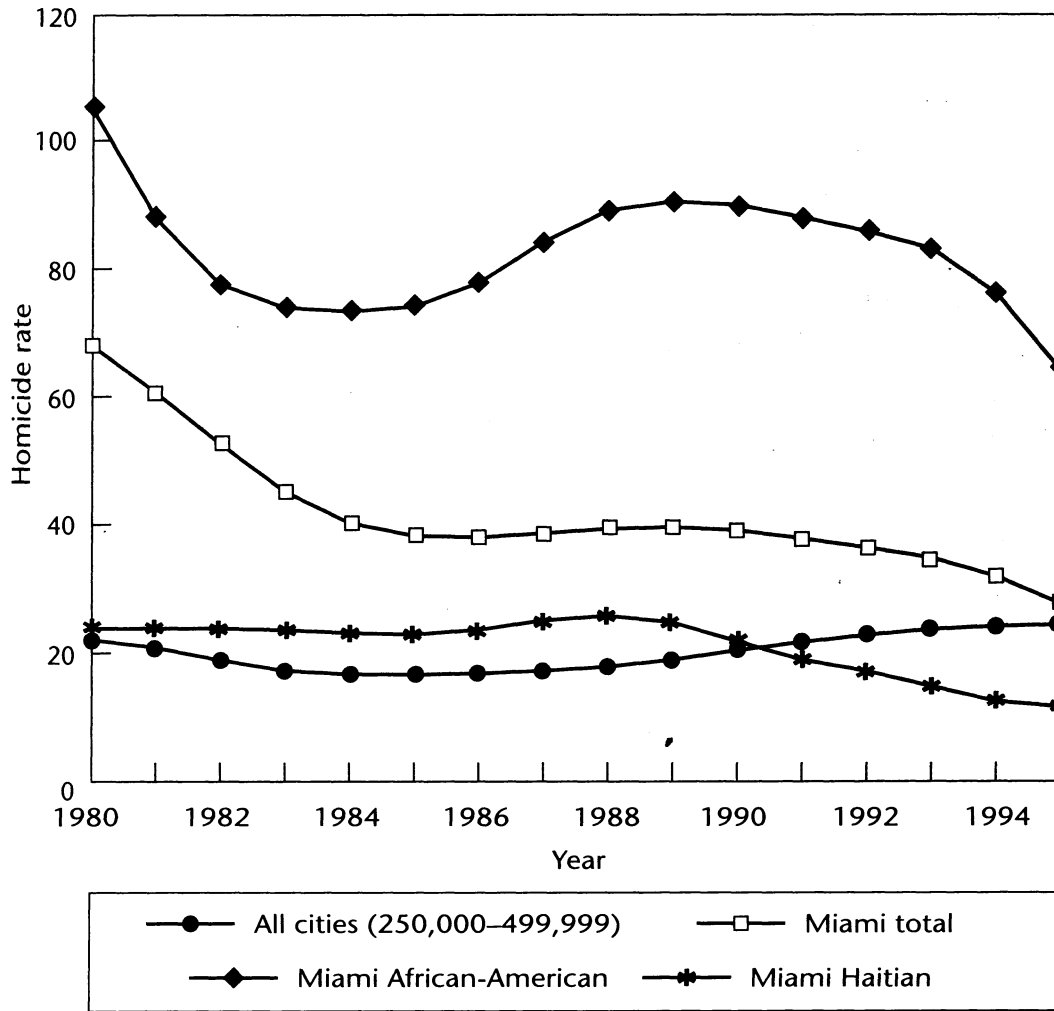


Sources: City of San Diego Police Department homicide investigations records 1980–95. Population estimates are based on data from the U.S. Bureau of the Census (1990); homicide rates for all cities are based on data from the U.S. Department of Justice, Federal Bureau of Investigation (1980–95).

Haitians have rarely been favorable (see exhibit 2) and are actually worsening, despite Haitians having homicide rates lower than those of *any* ethnic group in Miami and lower than the average in all small cities in the 1990s.

Finally, we examine homicide rates among San Diego's Asian immigrants (predominantly Vietnamese) in exhibit 8 and compare these rates with public attitudes about Vietnamese. At first glance, the level of homicide among Asians appears to ebb and flow; however, the rate never rises above single digits (7.5 to 8.0 per 100,000 Asians in San Diego). In fact, Asian rates fall below San Diego's total rate and well below the rates of cities with more than

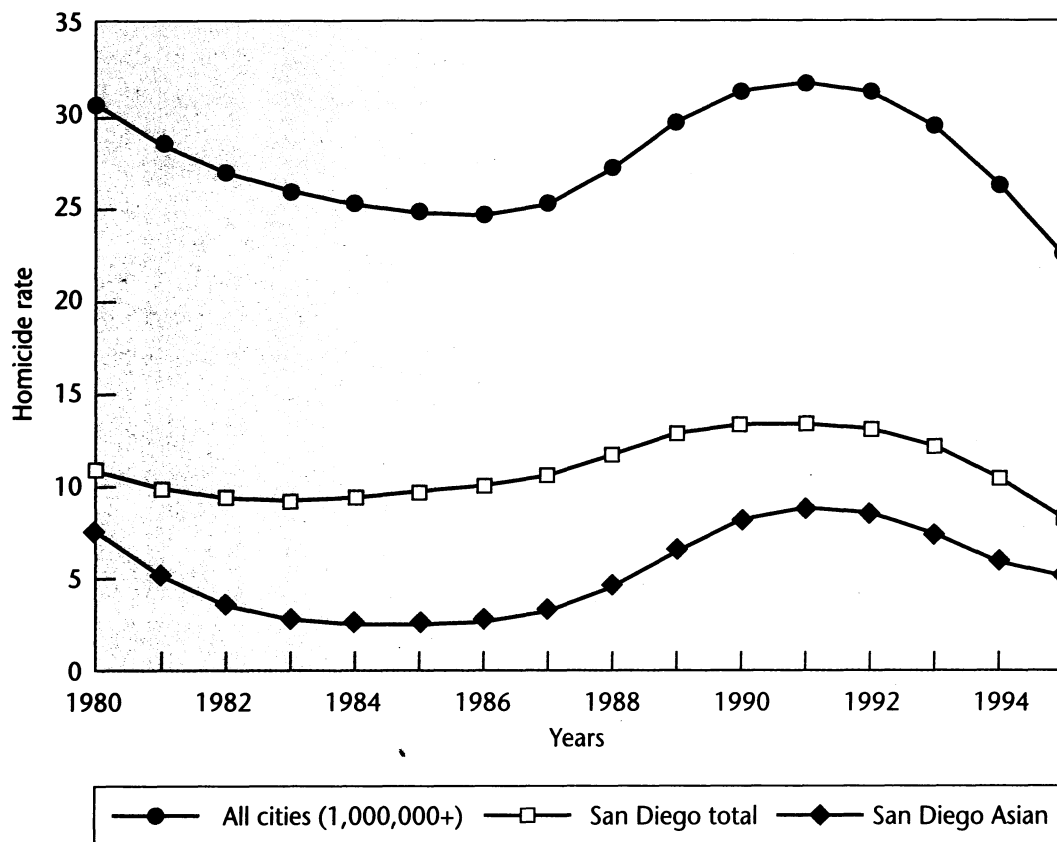
Exhibit 7. Miami's Haitian homicide victim rates in local and national context



Sources: City of Miami Police Department homicide investigations records 1980-95. Population estimates are based on data from the U.S. Bureau of the Census (1990); homicide rates for all cities are based on data from the U.S. Department of Justice, Federal Bureau of Investigation (1980-95).

1 million residents. Despite this, positive attitudes toward the Vietnamese have not materialized to any appreciable degree over the period of this study (see exhibit 2). Like the other immigrant groups, Asians continue to be viewed unfavorably despite their comparatively low involvement in crime, at least as measured by homicide rates. Apparently, national attitudes toward ethnic groups are not in line with crime rates (if we assume a favorable attitude to low crime groups) but are instead probably shaped by ethnic or racial stereotypes, not empirical data.

Exhibit 8. San Diego's Asian homicide victim rates in local and national context



Sources: City of San Diego Police Department Homicide Investigations records 1980–95. Population estimates are based on data from the U.S. Bureau of the Census (1990); homicide rates for all cities are based on data from the U.S. Department of Justice, Federal Bureau of Investigation (1980–95).

Conclusion

We can draw a number of broad conclusions from this review of immigration and crime in 20th-century America. First, there are good theoretical reasons to believe that immigrants should be involved in crime to a greater degree than natives. For example, immigrants face acculturation problems that natives do not, and immigrants tend to settle in disorganized neighborhoods characterized by deleterious structural conditions such as poverty, ethnic heterogeneity, a preponderance of young males, and possibly more criminal opportunities in the form of gangs. Also, the cultural codes of immigrants may conflict with the legal codes constructed by native groups. Despite these and other reasons to expect high levels of immigrant crime, the bulk of empirical studies conducted

over the past century have found that immigrants are usually underrepresented in criminal statistics. There are variations to this general finding, but these appear to be linked more to differences in structural conditions across areas where immigrants settle than to the cultural traditions of the immigrant groups. Local context appears to be the central influence shaping the criminal involvement of both immigrants and natives, although in many cases, immigrants seem more able to withstand crime-facilitating conditions than native groups.

We offer some plausible explanations for why immigrant crime rates are lower than expected. Contrary to a tradition of social science research on urban violence dating back to the pioneering work of Thomas and Znaniecki (1920), contemporary immigration might not create disorganized communities but instead stabilize neighborhoods through the creation of new social and economic institutions. Immigrants reside in highly impoverished communities but provide a buffer to further neighborhood decline through higher levels of intact and extended families and regular contact with the world of work. Moore and Pinderhughes (1993) note that immigrant Latinos, as a whole, have relatively high rates of employment, but in lower blue-collar occupations (e.g., operators, fabricators, and laborers) and in the informal economy (e.g., street vendors, domestics). Thus, immigrants are characterized more as the working poor than as chronically unemployed, and they work in areas dominated by small business owners and the self-employed.

To illustrate, in some areas, immigration has influenced the economy by increasing marginal jobs for newcomers in the secondary sector and contributed to labor market competition with other urban minority groups (see Aponte 1996). Thus, although immigration is linked to heightened poverty, many scholars describe a pool of foreign-born residents who are typically working, often at subsistence levels, and who are routinely attached to the labor market, although at times through the informal economy (see Introduction in Moore and Pinderhughes 1993).

Furthermore, Wilson (1987, 1996) and Sampson (1987) also describe how economic attachment is a key factor in maintaining family structures, stabilizing community institutions, and decreasing social problems in urban neighborhoods. The consequence for crime and violence is that although immigrant poverty is just as widespread as in African-American communities, its impact on violence might be lower than predicted because of greater attachment to the economy through low-paying but relatively steady jobs in ethnic enclaves, simultaneous with lower rates of family disruption (see also Portes 1996). Although speculative, this is at least one plausible account for our finding that immigrant crime is lower than expected. We invite future elaborations on this topic.

Much more research is needed on immigration and crime, particularly on the latest wave of immigration, to advance our knowledge beyond the general conclusions provided by this essay. Like others, we suggest that future research should be more open to the idea that immigration can be a positive influence on communities to suppress crime. We agree with Hagan and Palloni (1998, 382) that researchers should:

place the priority on finding ways to preserve, protect, and promote the social capital that . . . immigrants bring to their experience in the United States, rather than overemphasize issues of crime and punishment.

Academic study of immigrants that is limited to gangs and crime can serve only to promote the impression that immigrants are a crime-prone group—an image that the empirical research of the past 100 years does not support. In sum, this review suggests that native groups would profit from a better understanding of how immigrant groups faced with adverse social conditions maintain relatively low levels of crime.

This project would not have been possible without the generous cooperation of former Police Chief Donald Warshaw, Assistant Chief John Brooks, Lt. Bobbie Meeks, and Lt. John Campbell of the Miami Police Department (MPD). Former Chief of Police Jerry Sanders graciously provided entry to the San Diego Police Department (SDPD), and Lt. Glenn A. Breitenstein and Lt. Jim Collins kindly opened the doors to the SDPD homicide unit files. Special thanks to past and current detectives in the MPD and SDPD homicide investigation units for allowing us to consistently and continuously interrupt their daily work schedule over the past several years. The El Paso Police Department provided homicide data to S. Fernando Rodriguez and we thank them both. We would also like to thank Robert J. Bursik, Sr., and Gary LaFree for valuable comments and suggestions on earlier drafts of this chapter. Funding to Ramiro Martinez, Jr., was provided, in part, through the National Science Foundation (SBR-9515235), a Ford Foundation Postdoctoral Minority Fellowship, the Harry Frank Guggenheim Foundation, and the National Consortium on Violence Research (NCOVR). NCOVR is supported under grant SBR-9513949 from the National Science Foundation. The conclusions presented in this article are those of the authors and should not be taken as the view of any official agency. We alone are responsible, of course, for any errors of fact.

Notes

1. The fear that too many crime-prone immigrants are entering the United States is a contemporary concern, in addition to other reasons for anti-immigrant sentiment. In a national bestselling book promising “common sense about America’s immigration disaster,” a writer at *Forbes* and *National Review* magazines states: “[I]mmigration is not the *only* cause of crime. It may not even be the major cause of crime. But it is a *factor*” (Brimelow 1996, 182; emphasis in original).

Hailed as a “non-fiction horror story of a nation that is willfully but blindly pursuing a course of national suicide” (Jesse E. Todd, Jr., cited in the front matter of Brimelow 1996), such alarmist writings assume a strong link between immigrants and crime while providing little empirical data. In fact, Brimelow (p. 182) claims that “there has been no serious academic study of the impact on crime” of the post-1965 wave of immigration.

2. Although not evident in exhibit 1, the Latino homicide rates fluctuated from slightly more than 16 per 100,000 in 1985 to a high of 18.6 in 1991, and declined to a low of 12.4 in 1996 (U.S. Department of Health and Human Services 1998). The massive increase in legal immigration did not increase Latino homicide rates, which actually declined somewhat throughout the 1990s. Homicide rates for blacks and whites also declined after the peak years of immigration. Black rates fell from a high of 41.6 per 100,000 in 1991 to 29.9 in 1996, while white rates over a similar period dropped from 4.4 to 3.5. Thus, homicide rates declined for all groups after the arrival of large numbers of immigrants.

3. All rates are per 100,000 group-specific persons as measured by the 1990 census.

References

- Abbott, Edith. 1931. The problem of crime and the foreign born. In *Report on crime and the foreign born*. National Commission on Law Observance and Enforcement Report no. 10. Washington, D.C.: U.S. Government Printing Office.
- Abbott, G. 1915. Immigration and crime. *Journal of Criminal Law and Criminology* 6:522–532.
- Alaniz, Maria Luisa, Randi S. Cartmill, and Robert Nash Parker. 1998. Immigrants and violence: The importance of neighborhood context. *Hispanic Journal of Behavioral Sciences* 20 (May): 155–174.
- Aguirre, B.E., Rogelio Saenz, and Brian Sinclair James. 1997. Marielitos ten years later: The Scarface legacy. *Social Science Quarterly* 78 (June): 487–507.
- Anderson, Elijah. 1990. *Streetwise: Race, class, and change in an urban community*. Chicago: University of Chicago Press.

Aponte, Robert. 1996. Urban unemployment and the mismatch dilemma: Accounting for the immigration exception. *Social Problems* 43 (August): 268–283.

Baker, Susan Gonzalez, Frank D. Bean, Augustin Escobar Latapi, and Sidney Weintraub. 1998. U.S. immigration policies and trends: The growing importance of migration from Mexico. In *Crossings: Mexican immigration in interdisciplinary perspectives*, edited by M.M. Suarez-Orozco. Cambridge: Harvard University Press.

Bankston, Carl L., III. 1998. Youth gangs and the new second generation: A review essay. *Aggression and Violent Behavior* 3 (1): 35–45.

Beck, Roy. 1996. *The case against immigration*. New York: W.W. Norton.

Bowler, Alida C. 1931. Recent statistics on crime and the foreign born. In *Report on crime and the foreign born*. National Commission on Law Observance and Enforcement Report no. 10. Washington, D.C.: U.S. Government Printing Office.

Bradshaw, Benjamin, David R. Johnson, Derral Cheatwood, and Stephen Blanchard. 1998. A historical geographical study of lethal violence in San Antonio. *Social Science Quarterly* 79 (December): 863–878.

Brimelow, Peter J. 1996. *Alien nation*. New York: HarperPerennial.

Bursik, Robert J. 1988. Social disorganization and theories of crime and delinquency: Problems and prospects. *Criminology* 26 (November): 519–551.

Chin, Ko-lin. 1990. *Chinese subculture and criminality: Non-traditional crime groups in America*. Westport, Connecticut: Greenwood Press.

Cloward, Richard, and Lloyd Ohlin. 1960. *Delinquency and opportunity: A theory of delinquent gangs*. New York: Free Press.

Du Phuoc Long, Patrick. 1996. *The dream shattered: Vietnamese gangs in America*. Boston: Northeastern University Press.

Epstein, Gail, and Ronnie Greene. 1993. Dade's crime rate is highest in U.S., Florida is 1st among States. *Miami Herald*, 3 October.

Espenshade, Thomas J., and Maryanne Belanger. 1998. Immigration and public opinion. In *Crossings: Mexican immigration in interdisciplinary perspectives*, edited by M.M. Suarez-Orozco. Cambridge: Harvard University Press.

Ferracuti, Franco. 1968. European migration and crime. In *Crime and culture: Essays in honor of Thorsten Sellin*, edited by M.E. Wolfgang. New York: John Wiley & Sons.

Gans, Herbert J. 1992. Second generation decline: Scenarios for the economic and ethnic futures of the post-1965 American immigrants. *Ethnic and Racial Studies* 15:173–192.

- Glueck, Sheldon, and Eleanor Glueck. 1930. *Five hundred criminal careers*. New York: Alfred A. Knopf.
- Gurr, Ted Robert. 1989. The history of violent crime in America. In *Violence in America*, edited by T.R. Gurr. Vol. 1. Newbury Park, California: Sage Publications.
- Hagan, John, and Alberto Palloni. 1998. Immigration and crime in the United States. In *The immigration debate*, edited by J.P. Smith and B. Edmonston. Washington, D.C.: National Academy Press.
- Handlin, Oscar. 1959. *The newcomers: Negroes and Puerto Ricans in a changing metropolis*. Cambridge: Harvard University Press.
- Hawkins, Darnell F. 1999. African Americans and homicide. In *Issues in the study and prevention of homicide*, edited by M.D. Smith and M. Zahn. Thousand Oaks, California: Sage Publications.
- Hayner, Norman S. 1933. Delinquency areas in the Puget Sound region. *American Journal of Sociology* 39 (November): 314–328.
- Jonassen, Christen T. 1949. A re-evaluation and critique of the logic and some methods of Shaw and McKay. *American Sociological Review* 14 (October): 608–614.
- Kobrin, Solomon. 1959. The Chicago Area Project: A 25 year assessment. *Annals of the American Academy of Political and Social Science* 322 (March): 19–29.
- Lambert, John R. 1970. *Crime, police, and race relations: A study in Birmingham*. London: Oxford University Press.
- Lane, Roger. 1997. *Murder in America: A history*. Columbus: Ohio State University Press.
- Laughlin, Harry H. 1939. *Immigration and conquest*. New York: Special Committee on Immigration and Naturalization of the Chamber of Commerce of the State of New York.
- Lee, Matthew T., Ramiro Martinez, Jr., and S. Fernando Rodriguez. 2000. Contrasting Latinos in homicide research: The victim and offender relationship in El Paso and Miami. *Social Science Quarterly* 81 (1): 375–388.
- Lee, Yoon Ho. 1998. Acculturation and delinquent behavior: The case of Korean American youths. *International Journal of Comparative and Applied Criminal Justice* 22 (Fall): 273–292.
- Lewis, Oscar. 1965. *La vida: A Puerto Rican family in the culture of poverty*. New York: Random House.
- Lind, Andrew W. 1930a. The ghetto and the slum. *Social Forces* 9 (December): 206–215.

- . 1930b. Some ecological patterns of community disorganization in Honolulu. *American Journal of Sociology* 36 (September): 206–220.
- Marshall, Ineke Haen. 1997. *Minorities, migrants, and crime: Diversity and similarity across Europe and the United States*. Thousand Oaks, California: Sage Publications.
- Martinez, Ramiro, Jr. 1997a. Homicide among the 1980 Mariel refugees in Miami: Victims and offenders. *Hispanic Journal of Behavioral Sciences* 19 (May): 107–122.
- . 1997b. Homicide among Miami's ethnic groups: Anglos, blacks, and Latinos in the 1990s. *Homicide Studies* 1 (May): 17–34.
- . 1996. Latinos and lethal violence: The impact of poverty and inequality. *Social Problems* 43 (May): 131–146.
- Martinez, Ramiro, Jr., and Matthew T. Lee. Forthcoming. Comparing the context of immigrant homicides in Miami: Haitians, Jamaicans, and Mariels. *International Migration Review*.
- . 1999. Extending ethnicity in homicide research: The case of Latinos. In *Homicide: A sourcebook of social research*, edited by M.D. Smith and M. Zahn. Newbury Park, California: Sage Publications.
- . 1998. Immigration and the ethnic distribution of homicide in Miami, 1985–1995. *Homicide Studies* 2 (August): 291–304.
- McCord, Joan. 1995. Ethnicity, acculturation, and opportunities: A study of two generations. In *Ethnicity, race, and crime*, edited by D.F. Hawkins. Albany: State University of New York Press.
- Merton, Robert K. 1938. Social structure and anomie. *American Sociological Review* 3 (October): 672–682.
- Monkkonen, Eric H. 1989. Diverging homicide rates: England and the United States, 1850–1875. In *Violence in America*, edited by T.R. Gurr. Vol. 1. Newbury Park, California: Sage Publications.
- Moore, Joan, and Raquel Pinderhughes. 1993. *In the barrios: Latinos and the underclass debate*. New York: Russell Sage Foundation.
- Ousey, Graham C. 1999. Homicide, structural factors, and the racial invariance assumption. *Criminology* 37 (May): 405–426.
- Padilla, Amado M. 1980. *Acculturation: Theory, models, and some new findings*. Boulder, Colorado: Westview Press.
- Portes, Alejandro. 1996. *The new second generation*. New York: Russell Sage Foundation.

Portes, Alejandro, Juan M. Clark, and R.D. Manning. 1985. After Mariel: A survey of the resettlement experiences of 1980 Cuban refugees in Miami. *Cuban Studies* 15:37–59.

Portes, Alejandro, and Alex Stepick. 1993. *City on the edge: The transformation of Miami*. Berkeley: University of California Press.

Roper Reports. 1995. *Roper Report 95–4*. New York: Roper Starch Worldwide, June.

Rosenwaike, Ira, and Katherine Hempstead. 1990. Mortality among three Puerto Rican populations: Residents of Puerto Rico and migrants in New York City and in the balance of the United States, 1979–81. *International Migration Review* 24 (Winter): 684–702.

Ross, Harold. 1937. Crime and the native born sons of European immigrants. *Journal of Criminal Law and Criminology* 28 (July-August): 202–209.

Sampson, Robert J. 1987. Urban black violence: The effect of male joblessness and family disruption. *American Journal of Sociology* 93 (September): 348–382.

Sampson, Robert J., and Janet L. Lauritsen. 1997. Racial and ethnic disparities in crime and criminal justice in the United States. In *Ethnicity, crime, and immigration*. Vol. 21 of *Crime and justice: A review of research*, edited by M. Tonry. Chicago: University of Chicago Press.

Sampson, Robert J., and William Julius Wilson. 1995. Toward a theory of race, crime, and urban inequality. In *Crime and inequality*, edited by J. Hagan and R. Peterson. Stanford, California: Stanford University Press.

Sanchez-Jankowski, Martin. 1991. *Islands in the street: Gangs and American urban society*. Berkeley: University of California Press.

Scalia, John. 1996. *Noncitizens in the Federal criminal justice system, 1984–1994*. Special Report, NCJ 160934. Washington, D.C.: U.S. Department of Justice, Bureau of Justice Statistics.

Schneider, Hans Joachim. 1995. Foreigners as perpetrators and as victims in Germany. *EuroCriminology* 8–9:95–108.

Sellin, Thorsten. 1938. *Culture conflict and crime*. New York: Social Science Research Council.

Shaw, Clifford R., and Henry D. McKay. [1942] 1969. *Juvenile delinquency and urban areas*. Chicago: University of Chicago Press.

———. 1931. Social factors in juvenile delinquency. In *Report on the causes of crime*. National Commission on Law Observance and Enforcement Report no. 13. Washington, D.C.: U.S. Government Printing Office.

Short, James F. 1997. *Poverty, ethnicity, and violent crime*. Boulder, Colorado: Westview Press.

Simon, Rita J. 1993. Old minorities, new immigrants: Aspirations, hopes, and fears. *Annals of the American Academy of Political and Social Science* 30 (November): 61–73.

———. 1987. Immigration and American attitudes. *Public Opinion* 10 (July–August): 47–50.

———. 1985. *Public opinion and the immigrant: Print media coverage, 1880–1980*. Lexington, Massachusetts: Lexington Books.

Stepick, Alex. 1998. *Pride against prejudice: Haitians in the United States*. Boston: Allyn and Bacon.

Suarez-Orozco, Marcelo M. 1998. Introduction to *Crossings: Mexican immigration in interdisciplinary perspectives*, edited by M.M. Suarez-Orozco. Cambridge: Harvard University Press.

Sutherland, Edwin H. 1947. *Principles of criminology*. 4th ed. Chicago: J.B. Lippincott.

———. 1934. *Principles of criminology*. Chicago: J.B. Lippincott.

Sutherland, Edwin H., and Donald R. Cressey. 1960. *Principles of criminology*. 6th ed. Chicago: J.B. Lippincott.

Taft, Donald R. 1936. Nationality and crime. *American Sociological Review* 1 (October): 724–736.

Taylor, Paul S. 1931. Crime and the foreign born: The problem of the Mexican. In *Report on crime and the foreign born*. National Commission on Law Observance and Enforcement Report no. 10. Washington, D.C.: U.S. Government Printing Office.

Thomas, William I., and Florian Znaniecki. [1920] 1984. *The Polish peasant in Europe and America: Edited and abridged*. Chicago: University of Illinois Press.

———. 1920. *The Polish peasant in Europe and America: Volume IV, disorganization and reorganization in Poland*. Boston: Gorham Press.

Tonry, Michael. 1997. Ethnicity, crime, and immigration. In *Ethnicity, crime, and immigration*. Vol. 21 of *Crime and justice: A review of research*, edited by M. Tonry. Chicago: University of Chicago Press.

U.S. Bureau of the Census. 1990. 1990 census of population and housing. Summary tape file 3A. Retrieved 30 March 2000 from the World Wide Web: <http://venus.census.gov/cdrom/lookup>.

U.S. Commission on Immigration Reform. 1994. *Restoring credibility*. Washington, D.C.: U.S. Commission on Immigration Reform.

U.S. Department of Health and Human Services, National Center for Health Statistics. 1998. *Health, United States, 1998: With socioeconomic status and health chartbook*. Hyattsville, Maryland.

U.S. Department of Justice, Federal Bureau of Investigation. 1997. *Crime in the United States—1996*. Retrieved 12 January 2000 from the World Wide Web: http://www.fbi.gov/ucr/Cius_97/96CRIME/96crime2.pdf.

———. 1980–95. *Crime in the United States*. Uniform Crime Reports. Washington, D.C.

U.S. Department of Justice, Immigration and Naturalization Service. 1997. *Statistical yearbook of the Immigration and Naturalization Service, 1996*. Washington, D.C.

———. 1987. *Statistical yearbook of the Immigration and Naturalization Service, 1986*. Washington, D.C.

Vidal, Gore. 1986. The empire lovers strike back. *Nation*, 22 March, 350. Quoted in Karl Zinsmeister, Asians: Prejudice from top and bottom, *Public Opinion* 10 (July-August 1987): 10.

Vigil, James D., and J.M. Long. 1990. Emic and etic perspectives of gang culture: The Chicano case. In *Gangs in America*, edited by C.R. Huff. Newbury Park: Sage Publications.

Von Hentig, Hans. 1945. The first generation and a half: Notes on the delinquency of the native white of mixed parentage. *American Sociological Review* 10 (December): 792–798.

Warnshuis, Paul Livingstone. 1931. Crime and criminal justice among the Mexicans of Illinois. In *Report on crime and the foreign born*. National Commission on Law Observance and Enforcement Report no. 10. Washington, D.C.: U.S. Government Printing Office.

Whyte, William Foote. 1943. Social organization in the slums. *American Sociological Review* 8 (February): 34–39.

Wilbanks, William. 1984. *Murder in Miami: An analysis of homicide patterns and trends in Dade County (Miami) Florida, 1917–1983*. Lanham, Maryland: University Press of America.

Wilson, William J. 1996. *When work disappears: The world of the new urban poor*. New York: Alfred A. Knopf.

———. 1987. *The truly disadvantaged*. Chicago: University of Chicago Press.

Wolfgang, Marvin E. 1958. *Patterns in criminal homicide*. Philadelphia: University of Pennsylvania Press.

Wolfgang, Marvin, and Franco Ferracuti. 1967. *The subculture of violence: Towards an integrated theory in criminology*. London: Tavistock.

Yeager, Matthew G. 1997. Immigrants and criminality: A review. *Criminal Justice Abstracts* 29 (March): 143-171.

Young, Pauline V. 1936. Social problems in the education of the immigrant child. *American Sociological Review* 1 (June): 419-429.

Zinsmeister, Karl. 1987. Asians: Prejudice from top and bottom. *Public Opinion* 10 (July-August): 8-10, 59.

Appendix: Criminal Justice 2000 Volumes and Chapters

Volume 1. The Nature of Crime: Continuity and Change

Introduction to Volume 1

The Changing Nature of Crime in America

*by Gary LaFree, Robert J. Bursik, Sr., James Short, and
Ralph B. Taylor*

Theoretical Developments in Criminology

by Charles R. Tittle

The Politics of Crime and Punishment

by William Lyons and Stuart Scheingold

Dynamics of the Drug-Crime Relationship

by Helene Raskin White and D.M. Gorman

Criminal Justice Discovers Information Technology

by Maureen Brown

Explaining Regional and Urban Variation in Crime: A Review of Research

by Graham C. Ousey

Change and Continuity in Crime in Rural America

by Ralph A. Weisheit and Joseph F. Donnermeyer

A Century of Juvenile Justice

by Philip W. Harris, Wayne N. Welsh, and Frank Butler

525

Changes in the Gender Gap in Crime and Women's Economic Marginalization

by Karen Heimer

On Immigration and Crime

by Ramiro Martinez, Jr., and Matthew T. Lee

Volume 2. Boundary Changes in Criminal Justice Organizations

Introduction to Volume 2

A Century of Changing Boundaries

by Charles M. Friel

The Privatization and Civilianization of Policing

by Brian Forst

The Changing Boundaries Between Federal and Local Law Enforcement

by Daniel C. Richman

The Governance of Corrections: Implications of the Changing Interface of Courts and Corrections

by Christopher E. Smith

Brick by Brick: Dismantling the Border Between Juvenile and Adult Justice

by Jeffrey A. Butts and Ojmarrh Mitchell

The Changing Boundaries of the Criminal Justice System: Redefining the Problem and the Response in Domestic Violence

by Alissa Pollitz Worden

The Internationalization of Criminal Justice

by Dr. Richard H. Ward

Community Justice: A Conceptual Framework

by David R. Karp and Todd R. Clear

Volume 3. Policies, Processes, and Decisions of the Criminal Justice System

Introduction to Volume 3

Policies, Processes, and Decisions of the Criminal Justice System

*by Julie Horney, Ruth Peterson, Doris MacKenzie, John Martin,
and Dennis Rosenbaum*

Prison Use and Social Control

by James P. Lynch and William J. Sabol

Changing the Contours of the Criminal Justice System To Meet the Needs of Persons With Serious Mental Illness

by Arthur J. Lurigio and James A. Swartz

Assessing Correctional Rehabilitation: Policy, Practice, and Prospects

by Francis T. Cullen and Paul Gendreau

The Evolution of Decisionmaking Among Prison Executives, 1975–2000

by Kevin N. Wright

Community Justice and a Vision of Collective Efficacy: The Case of Restorative Conferencing

by Gordon Bazemore

Community Policing in America: Changing the Nature, Structure, and Function of the Police

by Jack R. Greene

Criminal Justice and the IT Revolution

by Terence Dunworth

Thirty Years of Sentencing Reform: The Quest for a Racially Neutral Sentencing Process

by Cassia C. Spohn

The Convergence of Race, Ethnicity, Gender, and Class on Court Decisionmaking: Looking Toward the 21st Century

by Marjorie S. Zatz

Volume 4. Measurement and Analysis of Crime and Justice**Introduction to Volume 4****Measurement and Analysis of Crime and Justice:
An Introductory Essay**

*by David Duffee, David McDowall, Lorraine Green Mazerolle, and
Stephen D. Mastrofski*

The Self-Report Method for Measuring Delinquency and Crime

by Terence P. Thornberry and Marvin D. Krohn

**Self-Report Surveys as Measures of Crime and Criminal
Victimization**

by David Cantor and James P. Lynch

Theory, Method, and Data in Comparative Criminology

by Gregory J. Howard, Graeme Newman, and William Alex Pridemore

Spatial Analyses of Crime

by Luc Anselin, Jacqueline Cohen, David Cook, Wilpen Gorr, and George Tita

Measuring the Costs and Benefits of Crime and Justice

by Mark A. Cohen

**Measuring the Sexual Victimization of Women: Evolution, Current
Controversies, and Future Research**

by Bonnie S. Fisher and Francis T. Cullen

**Measurement and Analysis of Drug Problems and Drug
Control Efforts**

by Jonathan P. Caulkins

Fear of Crime in the United States: Avenues for Research and Policy

by Mark Warr

**Measurement and Explanation in the Comparative Study of
American Police Organizations**

by Edward R. Maguire and Craig D. Uchida

Standards and Measures of Court Performance

by Ingo Keilitz

PROPERTY OF

National Criminal Justice Reference Service (NCJRS)

Box 6000

Rockville, MD 20849-6000

About the National Institute of Justice

The National Institute of Justice (NIJ), a component of the Office of Justice Programs, is the research agency of the U.S. Department of Justice. Created by the Omnibus Crime Control and Safe Streets Act of 1968, as amended, NIJ is authorized to support research, evaluation, and demonstration programs; development of technology; and both national and international information dissemination. Specific mandates of the Act direct NIJ to:

- Sponsor special projects and research and development programs that will improve and strengthen the criminal justice system and reduce or prevent crime.
- Conduct national demonstration projects that employ innovative or promising approaches for improving criminal justice.
- Develop new technologies to fight crime and improve criminal justice.
- Evaluate the effectiveness of criminal justice programs and identify programs that promise to be successful if continued or repeated.
- Recommend actions that can be taken by Federal, State, and local governments as well as by private organizations to improve criminal justice.
- Carry out research on criminal behavior.
- Develop new methods of crime prevention and reduction of crime and delinquency.

In recent years, NIJ has greatly expanded its initiatives, the result of the Violent Crime Control and Law Enforcement Act of 1994 (the Crime Act), partnerships with other Federal agencies and private foundations, advances in technology, and a new international focus. Examples of these new initiatives include:

- Exploring key issues in community policing, violence against women, violence within the family, sentencing reforms, and specialized courts such as drug courts.
- Developing dual-use technologies to support national defense and local law enforcement needs.
- Establishing four regional National Law Enforcement and Corrections Technology Centers and a Border Research and Technology Center.
- Strengthening NIJ's links with the international community through participation in the United Nations network of criminological institutes, the U.N. Criminal Justice Information Network, and the NIJ International Center.
- Improving the online capability of NIJ's criminal justice information clearinghouse.
- Establishing the ADAM (Arrestee Drug Abuse Monitoring) program—formerly the Drug Use Forecasting (DUF) program—to increase the number of drug-testing sites and study drug-related crime.

The Institute Director establishes the Institute's objectives, guided by the priorities of the Office of Justice Programs, the Department of Justice, and the needs of the criminal justice field. The Institute actively solicits the views of criminal justice professionals and researchers in the continuing search for answers that inform public policymaking in crime and justice.

To find out more about the National Institute of Justice,
please contact:

National Criminal Justice Reference Service,
P.O. Box 6000
Rockville, MD 20849-6000
800-851-3420
e-mail: askncjrs@ncjrs.org

To obtain an electronic version of this document, access the NIJ Web site
(<http://www.ojp.usdoj.gov/nij>).

