

Violent Crime

Nicholas Corsaro

The empirical examination of criminal violence typically centers on four interrelated units of analysis: (1) individuals, (2) groups such as gangs and gang networks, (3) events, and (4) places. While there is certainly a high degree of overlap across each of these different units (e.g., gang members are more likely to target suitable victims in high-risk community contexts), the present chapter attempts to disentangle each of these various dimensions of violent crime. Its overall purpose is to help inform theory and practice and highlight the most promising violent crime prevention approaches that attempt to understand and address each of these various dimensions of violent crime.

The chapter is outlined as follows. First, a review of violent crime across individuals, groups, events, and places is provided. Second, for each of the various units of analysis, in-depth methodological and analytical discussions are presented regarding consistent findings in the literature as well as the latest developments in data analysis and research. Third, the chapter concludes with a discussion of promising police-led strategies designed to reduce violent crime that focus on places, incidents, individuals, and groups. Evaluation approaches used by researchers to test the utility of these police-led approaches are also highlighted.

Individual-Level Violence

A large body of research attempts to distinguish violent criminal behavior from more general forms of crime and deviance, while yet other research suggests that patterns in violence are simply a product of versatile criminal behavior (Osgood et al., 1988).

These varying perspectives stem from a broader set of theoretical and analytical approaches, which attempt to explain antisocial behavior at the individual level. Gottfredson and Hirschi (1990) proposed that criminality is best explained by a general theory of crime, on the grounds that stable individual differences in criminal behavior are general rather than specific and are linked to low self-control and high impulsivity. From this perspective, those individuals who are more likely to seize the opportunity and commit criminal (and occasionally violent) acts are also more likely than most others to begin offending early on in their life, to offend more persistently, to engage in a variety of crimes, and to desist in later life (Dean, Brame, and Piquero, 1996; Hirschi and Gottfredson, 1995). In contrast to this perspective, some researchers have illustrated that offending patterns are dynamic rather than static.

For instance, Loeber (1990) argued that higher rates of overall offending predict an increased likelihood of violence. Farrington (1986) showed that the adolescent peak of offending within the age-crime curve reflects a temporary increase in the number of people involved in antisocial and delinquent behavior. Likewise, Moffitt (1993) proposed that there are two qualitatively distinct categories of individuals who engage in antisocial, delinquent, and criminal behaviors: adolescent-limited offenders and life-course-persistent offenders. Adolescent-limited offenders are offenders who tend to be temporarily involved in antisocial behavior during specific periods, calibrated with their own physical and social development. This larger group of individuals eventually age out. Comparatively, life-course-persistent offenders form a smaller group of individuals who engage in crime continuously. Figure 1.1 displays the average age-crime curve for all general arrests and violent arrests for 2000–2011 reported to the Federal Bureau of Investigations (FBI) (Bureau of Justice Statistics, 2014a).

Methodologically speaking, when researchers examine the intersection of age, race, gender, and offense-specific patterns of violence, it is important to understand that officially reported data such as arrests and crime incidents can be inherently biased (Cernkovich, Giordano, and Pugh, 1985). Arrests that serve as the starting point of official records of crime are funneled through police decision-making (Smith and Visher, 1981). Research indicates that police officers can observe similar patterns of behavior in different groups (e.g., males vs. females; blacks vs. whites) and then give different responses to similar incidents. For example, in a study that examined police officers' decisions to arrest in cases that involved physical violence between citizens, Smith (1987) specifically found that a number of contextual factors influenced police decisions to arrest, which included victim attributes (e.g., police were less likely to arrest in violent encounters involving black or female victims) and neighborhood context (e.g., police were more likely to arrest and less likely to use mediation in lower-status neighborhoods). Labeling theory helps explain social responses to crime and deviance. Sociologist Howard Becker (1963) argued that the application of a label to a person influences the way institutions of social control respond to that individual's behavior. In short, official arrest and incident data have the potential to be filtered through a lens of interpretation and decision-making processes that take place among police officers. Thus, while official data provide a

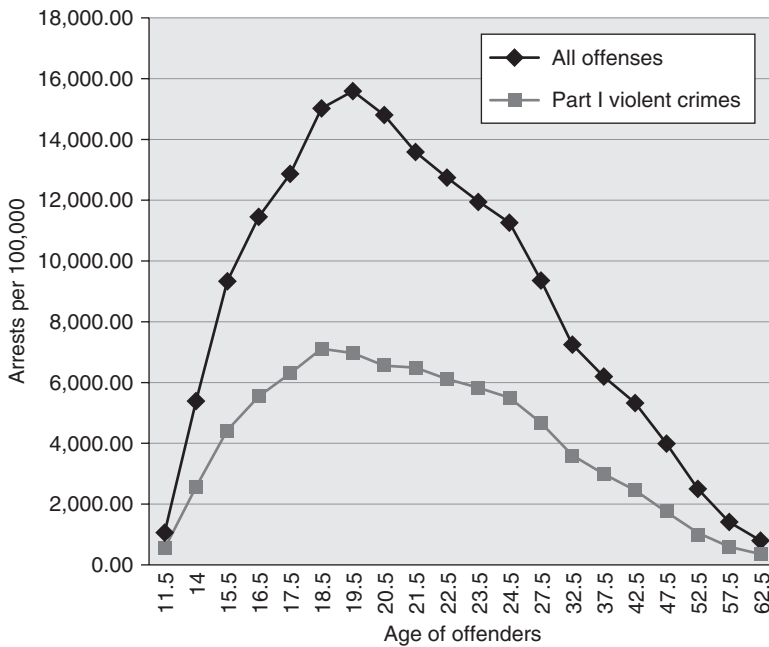


Figure 1.1 Age-crime curve for US arrests, 2000–2011.

relatively strong foundation for the measurement of criminal violence, such sources also have a number of serious limitations (e.g., unreported crimes; police officer decision-making; selection bias among citizens who report incidents) for those who attempt to more fully understand the nature and magnitude of violent crime. Indeed, data triangulation is a critical dimension for understanding individual patterns of offending over the life course.

Self-reported data provide more detailed information on behavioral patterns and are not influenced by the same potential biases as officially reported data. However, data from self-reports have an altogether different set of strengths and limitations. There are seemingly two important factors that researchers need to consider when examining self-report data related to violence. First, does the analysis focus on general crime and deviance or on specific crimes, such as violence and serious offenses? Analyses derived from data that focus only on more serious types of violence have the potential to ignore less serious and more typical types of crime (e.g., minor property offenses). Any theoretical test of violent offending should specifically model the causal processes that lead to violence; and those causal processes should be somewhat distinct from more general (and minor) offending patterns, if indeed offense specialization exists. Otherwise the sequencing of events may be quite similar, and violent crime is simply reflective of more general and more common types of crime.

Second, researchers must assess whether self-reports are drawn from institutionalized or noninstitutionalized populations. In the early 1990s, the National Research Council (NRC) argued that self-report studies from the general population are

unsuitable for the study of violent crime. The NRC (1993) cited three reasons for this position: (1) the base rate of violent crimes is too low to generate reliable estimates; (2) truly violent persons are not typically included in general population samples; and (3) information about the sequencing of different types of offenses is not collected. The important point here is that self-reports from members of the general population are much less likely to give information on violence due to the relative infrequency of violence among the general population. Comparatively, when a richer context of violence and more details about it can be ascertained from institutionalized and previously violent populations, the information gleaned from these respondents is not generalizable to the broader population; in other words, more detailed narratives about violence can be better obtained from populations with a propensity toward violence. Relying on the strengths and weaknesses of these different data sources, researchers have attempted to assess whether violent offending is specialized in nature.

Reiss and Roth (1993, p. 381) specifically asked: "What are the differences between people who commit violent acts and those who commit more general, delinquent criminal, or antisocial acts?" Studies have consistently indicated that violent offenders tend to commit *more crimes* than nonviolent offenders. Thus, at the individual level, violent crimes seem to be a byproduct of overall offending patterns (simply put, they would be crimes at a higher overall rate). Additionally, there is no evidence that individual pathways to violence are empirically distinguishable from pathways that lead to general juvenile (and later adult) offending. Specifically, the family background and the childhood antisocial behavior of juveniles are quite similar for both high-frequency nonviolent and violent youths (Capaldi and Patterson, 1996; Piquero, 2000). Thus offense frequency accounts for most of the variation in violent offending for high-risk youths.

When examining individual-level correlates of violence, it is also necessary to analyze the role that victimization plays in the cycle of violence. Cohen, Kluegel, and Land (1981) argued that the probability of individual-level victimization is influenced by the following four factors: proximity to potential offenders; exposure to potential offenders; guardianship against victimization; and target attractiveness. From a violence-specific framework, guardianship and attractiveness usually refer to specific actions taken by victims that increase (or limit) their likelihood of victimization; such actions include deviant behaviors (Sampson and Lauritsen, 1990). The relationship between age and violent victimization risk is best described as a curve that peaks in the early to late teenage years, then drops precipitously through the remainder of the life course (Hirschi and Gottfredson, 1983). To illustrate this relationship, Figure 1.2 shows the average age and violent crime victimization risk for the period between 2000 and 2011 (Bureau of Justice Statistics, 2014b). Thus the violent crime age (Figure 1.1) and the violent victimization age (Figure 1.2) curves have considerable empirical overlap.

Individuals who are victimized during these critical developmental stages of adolescence are much more likely to suffer from a range of problems including depression, alcohol or drug dependence, phobic disorders, and more general forms of psychological distress (Robins and Rutter, 1990). Violent victimization during this

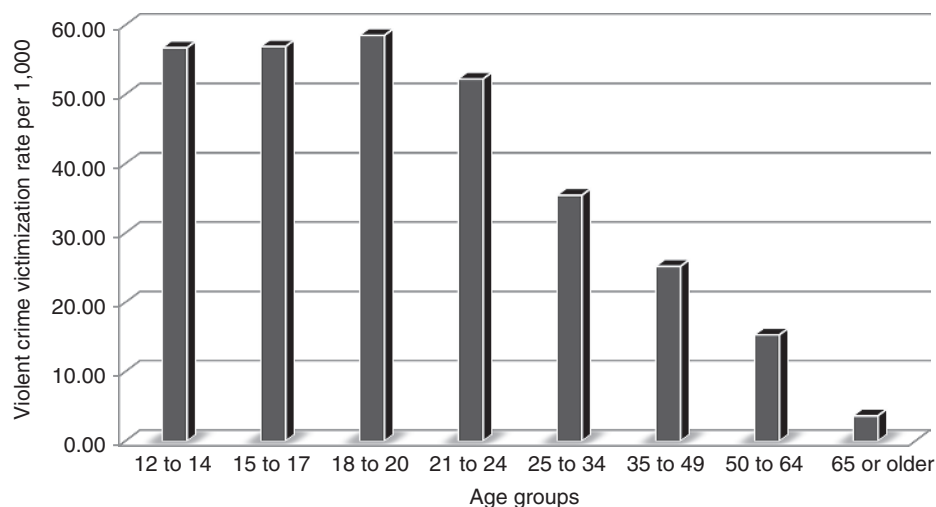


Figure 1.2 Violent crime victimization by age group, 2000–2011.

important time has long-term consequences such as disruption of social networks. In short, exposure to, and the consequences of, being a victim of physical, social, and psychological trauma as a teenager appear to potentially shape individuals' life-course trajectory, putting them at greater risk for both future victimization and future offending by disrupting stable transitions into adulthood. This also indirectly impacts opportunities for employment, normative beliefs, relationship stability, and support (Macmillan, 2001). Thus violent crime victimization and offending become cyclical in nature. Cycles of violence are perhaps best illustrated in group violence, particularly in the case of gangs.

Groups of Violent Offenders: The Case of Gangs

When high-risk individuals operate within, and are potentially influenced by, a network of offenders, the unit of analysis typically shifts to focus on group behavior – the most common of which is the focus on gangs. Certainly, it is possible to analyze gangs both at the individual level and at the macrolevel – in other words, it is possible to analyze individuals who are affiliated with gangs and broader social structures that facilitate gang membership. For the purpose of this discussion, the focus on gangs will be restricted to group-level processes (for a comprehensive review of prior gang research across multiple levels of analysis, see Decker, Melde, and Pyrooz, 2013). Gangs, and individuals within them, are at a substantially higher risk for violent offending and victimization (Short, 1997). However, the processes by which gang involvement influences violence are not always clear.

While gang membership is associated with an increased risk of violent offending and violent victimization, the extent to which gang membership plays a causal role in such changes in behavior is less clear (Thornberry et al., 1993). There are three

theoretical frameworks that might explain how gang membership impacts delinquency and criminality: selection, facilitation, and enhancement. The selection model suggests that selection into a gang is the causal force behind the increased level of risk to gang members. Facilitation is a process whereby social learning, opportunity, and adaptation become primary reasons for increased risk to gang members. Enhancement is an intersection between selection and facilitation: the nature of the individual intersects with the nurture provided by the gang, which increases the predisposition (or penchant) toward violence in individuals who already have it. Melde and Esbensen (2013) found that gang membership has an independent effect on delinquency (even after controlling for selection effects), and that joining a gang is often associated with a reduction in informal social controls. Thus the group component of gang membership seemingly has an independent impact on individuals' levels of delinquency and violence.

There are also three potential mechanisms that likely lead to increased violence among gang members. First, the impact of group identity and collective orientation toward criminal involvement often facilitates group processes (Maxson and Esbensen, 2012). Specifically, individuals who adopt this orientation are more likely to obtain status within gangs. This is because gangs value a normative belief system that encourages and rewards toughness, power, and troublemaking (Miller, 1958). In short, advancing in a gang's hierarchy requires the willingness and capacity to resort to violence when this is deemed appropriate by the group.

Second, a gang's organizational structure also plays a role in violence, in that tightly woven organizations often help set and accomplish criminally oriented goals and can secure gang stability (Decker, Bynum, and Weisel, 1998). Gangs that are more loosely structured and less clearly defined have difficulty in obtaining status and accomplishing goals. Groups that are oriented toward violent crime from their organizational hierarchy will more likely resort to violence as a means of dispute resolution toward those goals.

Third, the intersection between self-identification and normative group orientation is perhaps the primary mechanism that explains gang violence at a group level. Decker et al. (2013) contend that the bonds between gang members are built on a normative orientation toward shared goals and interests, and those same bonds can serve as a catalyst for violence, for example in the form of response to a perceived insult or affront to face (Anderson, 1999). Likewise, Felson (2006) argues that gang members often engage in violence in order to protect themselves and because there are minimal sanctions that can be imposed upon them by agents of informal social control. Indeed, many gang members believe that they must utilize violence in response to symbolic threats to their status and that failure to do so would weaken individuals' normative orientations toward the gang – and the gang itself (Papachristos, 2009). From this perspective, direct victimization of an individual within the gang is shared indirectly among other members. This can have lasting consequences, due to the increased likelihood of a violent response.

A key methodological issue about gangs is that membership is often transient for many gang members (Thornberry et al., 1993). In order to capture the sequencing of

life events that corresponds to behavior during membership phases, waves of surveys (self-report or victimization) are often utilized. However, repeated waves of cross-sectional surveys pose problems when one tries to disentangle the sequencing of life events from the actual change in behaviors. Stated simply, there is a gap between reported changes in behavior (as part of self-reported gang membership) and the reporting of those behaviors in surveys. Equal intervals of measurement are assumed for self-report analyses that use traditional regression-based methods. Additionally, more serious offenses are less frequent than minor offenses, which are difficult to parse out when attempting to examine offense frequency, severity, and specialization.

Understanding gang violence also requires an analysis of the microsocial contexts of group members. One common form of violence that occurs within gangs is retaliation (Decker, 1996). A review of the scholarly literature on homicides indicates that the majority of gang-related homicides are retaliatory, expressive, or spontaneous in nature (Klein and Maxson, 1989; Pizarro and McGloin, 2006). When one examines gang violence, incidents are often viewed through a lens that focuses on a contagion effect, where an initial incident can lead to a subsequent chain of violent incidents. This chain often sweeps up other high-risk individuals, as well as uninvolved bystanders caught up in the crossfire.

At a lower level, Hughes and Short (2005) illustrated that gang violence is often contextual and that pretexts for capturing gang incidents were critical to a more complete understanding of behavior. Specifically, the authors found that status concerns among gang members were the primary reason for violent responses to potential conflicts. These findings also highlight the need for violence research to analyze incidents (or events) as specific focal points.

Violent Crime Incidents

When critically examining violent crime incidents, it is imperative to understand the situational and contextual circumstances of the interaction between offender and victim, as well as its evolution. Cornish and Clarke (1986) proposed a rational choice perspective on criminality, according to which offenders weigh decision-making options differently across situationally and contextually different offense types. Thus, through this theoretical lens, violence looks different in nature from other, more general types of offending, because the motivations and circumstances for violent crime are different from the motivations and circumstances for other types of crime.

Incident-level analyses typically focus on exchanges between actors (i.e., victims, offenders, and third parties). An aggregate analysis conducted by Rand (1994) illustrates that, of the 1.4 million hospital emergency department patients treated for nonfatal injuries, 47 percent were most likely to be injured by someone known: a spouse, an intimate partner, a family member, a friend, or an acquaintance. Table 1.1 provides a breakdown of reported relationships between offenders and victims who

Table 1.1 Violent crime victim–offender relationships.

<i>Relationship</i>	<i>Offenses</i>	<i>Percent</i>
Unrecorded relationship	389,151	29%
Friend or acquaintance	308,644	23%
Stranger	308,630	23%
Parent, child, or relative	107,352	8%
Current boyfriend/girlfriend	134,190	10%
Spouse or former spouse	93,933	7%
Total	1,341,900	100%

sought hospital attention after violent victimization in 1994. Roughly half of all victims knew their assailants prior to their victimization. Indeed only 23 percent of all violent victimizations were reported as stranger-related.

In many cases violent events unfold as a result of “character contests” where there is a confrontation between actors to establish or save face in social occasions (Goffman, 1967). One of the most widely studied violent criminal events, homicide, has the lowest dark (or unknown) figure of crime. Thus, official records of homicide incidents tend to represent the actually known distribution of these events as they occur within a population. The analysis of situational transactions typically relies on a diverse range of methodological approaches such as ethnographies, in-depth respondent interviews, and various classifications of characteristics that occur in violent crime events. A number of different data collection approaches are used to obtain this type of detailed information, for instance participant observation, field notes, interviews, surveys, and coding of official records (e.g., police reports). The goal of these various methodological approaches is to collect data in such ways that the researcher imposes very little personal bias onto them and social meanings are perceived from the points of view of the research participants (Orbuch, 1997). In terms of criminal violence, situational analyses have been adapted to examine homicide incidents; and here two general findings have emerged (Luckenbill, 1977).

First, the majority of homicides occur during leisurely hours (between 6 p.m. and 2 a.m.), and particularly at the weekend (Messner and Tardiff, 1985). Homicide risk is also highest where informal affairs permit a wide range of acceptable (though illegal) activities among the various actors involved. Leisurely activities often include drinking, taking drugs, selling and purchasing sex, and gambling, to name a few. Of course, other homicides involve intimates such as spouses, family members, friends, or coworkers; and still a small proportion of homicides involve actors with little to no familiarity to one another.

Second, Luckenbill (1977) found that the majority of homicide incidents progressed through a series of stages or steps through which the victim – the person who gets killed – and the offender – the person who commits the killing – negotiate the event. These stages typically unfold as follows: (1) an initial (perceived) offense to face committed by one actor (typically, the homicide victim); (2) an interpretation by the other actor (typically, the eventual offender) that the transgression was

personally offensive and requires a response; (3) a decision by the eventual offender to stand his or her ground, in an effort to reaffirm face; (4) a decision by the eventual victim whether to stand his or her ground or to apologize (and possibly lose face to the audience); (5) a battle where the lethal act takes place; and (6) the final stage, where the offender has to decide what to do and where to go after the victim was fatally injured. In short, most homicides examined by Luckenbill (1977) were not one-sided events with unwitting victims who assumed a passive role, but rather were likely to include dynamic interchanges between offenders, victims, and third parties.

Felson and Steadman (1983) extended situational event analyses to encompass both assaults and homicides. In their review of incidents, these authors found that casting a person into a negative situational role often resulted in retaliatory actions designed to demonstrate a more favorable identity (e.g., by counterthreatening or counterattacking). Violent assaults and homicides often occur as a function of a perceived violation of conduct during a serious altercation or event. Felson and Steadman also found that, in the vast majority of homicides with witnesses, these third parties often served as antagonists rather than mediators. Thus the situational aspects of violence are complex in that witnesses often play some role in violent events.

Research also suggests that nonlethal violent events involving intimates (e.g., domestic violence assaults) are similar to fatal incidents. Dobash and Dobash (1984) illustrated that violent domestic events across various individuals seemingly display similarities in terms of sequencing. Often males with a propensity toward violence attempt to control their intimate partners and display behaviors associated with jealousy and possessiveness. Concerns about money and relationship stability are also typical triggers among high-risk actors. Female victims reported that offenders typically became physically violent when their authority was challenged or in situations of perceived loss of authority. Importantly, narrative interviews indicated that the violence rarely consisted of a single physical attack but rather involved a series of attacks (e.g., multiple slaps or blows). A common response by victims was to stop the argument, in an effort to deescalate the violence; likewise, a typical response by offenders was to act as though nothing happened, so that interactions typically returned to pre-violence level – until the next event.

From a methodological standpoint, early versions of situational crime research utilized official police records from assaults and homicides, though this data source had limited information in terms of unraveling the dynamic development of events. Interview and community participation methods are better suited to disentangle interactional and situational aspects of violence. For example, Straus (1979) relied on the conflict tactic scale (CTS) in order to empirically understand the dynamics of conflicts and subsequent violence. The CTS (and its later versions) typically involves a researcher's conducting an assessment with a victim or a perpetrator of prior violent activity (or with both) by asking and measuring how often in the past period of investigation (e.g., in the past year) that person discussed difficult issues with his/her spouse, insulted or swore at the spouse, smashed, hit, or kicked something (including his/her spouse), and feels in control of things happening to him/her

(Straus, 1979). Scoring takes place on three distinct parameters: prevalence (which establishes whether an assault, injury, or sexual coercion ever occurred); frequency (which establishes the number of times an event has occurred over a period of time, such as the past year), and severity (which can be nonexistent, minor, or severe). Detailed measurement tools like the CTS provide researchers with more explicit facts about how often violent events unfold and how serious they are. Likewise, there is a need to focus on the context in which violence occurs.

The Geography of Violent Crime

One of the most consistent findings in criminology is that crime and violence are not randomly distributed across geographic space. There are consistent structural correlates that correspond with violent crime at varying geographic levels: neighborhoods, cities, counties, standard metropolitan statistical areas, hot spots, and street segments. However, this seemingly commonsensical finding has actually resulted from a long and arduous research process, and the nuances of analysis are more complex than might otherwise appear. A place-based orientation to explaining violence has its roots in Shaw and McKay's (1942) modeling of juvenile delinquency, which contains their analysis of serious and violent juvenile offenses by place. The Chicago-based researchers argued that, at a geographical level, ethnic heterogeneity, residential instability, and poor economic status disrupted the social organization of communities, which led to high rates of crime and delinquency by juveniles across neighborhoods. In short, their analysis focused on the places that presented high rates of delinquency over time.

Likewise, Bullock (1955) examined homicide distributions across census tracts in Houston, Texas in the 1940s. As in earlier community level research, Bullock found that homicides were disproportionately more likely to occur in economically disadvantaged communities, which had high rates of unemployment combined with limited opportunities for social advancement. Similarly, Curry and Spergel (1988) found that a multidimensional measure of poverty – unemployment, people below the poverty level, and mortgage investment – simultaneously incorporated into a single item, had large and significant positive effects on gang-related homicide rates in Chicago in the late 1970s through the mid-1980s. Indeed, economic status (and strain) is almost always a significant associate of violence across the vast majority of studies.

Taylor and Covington (1988) found that changes in community structure, especially in neighborhoods that experienced declines in economic status and stability, were linked to increases in aggregate-level violence. In particular, they found that neighborhoods that experienced sharp increases in housing populations also experienced increases in violent crime. The authors argued that in underclass neighborhoods increases in violence were correlated with increases in deprivation, while in redeveloping neighborhoods violence was associated with broader community disorganization.

Researchers have worked to examine the specific influence of urban social structure on violence, and this has not been easy to disentangle. Multiple investigations often

use different measures to capture similar social structural components (e.g., poverty, unemployment, and disadvantage), and these different variables are usually highly correlated. In the 1980s, when each measure was introduced separately and independently, inconsistent findings and biased results began to emerge in the literature.

In order to address this major methodological limitation, Land, McCall, and Cohen (1990) examined city- and state-level measures that correspond to violence from 1960 to 1980. While their study included data collected over a 20-year span, the analyses were conducted through a series of piecewise (or independent) cross-sectional statistical models (the 1960s' model; the 1970s' model; the 1980s' model). Land and colleagues specifically found that most of the following measures within cities and states were consistently represented across a host of different studies: population size and density; percentage of population living in poverty; unemployed people; black people; children living with a single parent; and median home income. Up to that point, scholars interested in a macrosocial explanation of violence most often attempted to assess the independent and unique influences on violence for these highly interrelated measures. Land and colleagues proposed the use of principal components analysis, which for their investigation collapsed this highly interrelated set of variables into two factors: population structure (population size and population density) and resource deprivation (measures of income inequality, percentage of poverty, and children living with single parents). By using this type of strategy, Land and colleagues were able to conduct an analysis that was more accurate and reduced the threat of model misspecification. They concluded that population structure, resource deprivation, and the proportion of divorced males in the population consistently correspond to homicide rates at a macrosocial level. Thus their study demonstrated the need for an analytic modeling of violence, designed to control for the high degree of interrelatedness between measures that basically capture similar social process. Land and colleagues' findings demonstrated that, taken together, the multiple dimensions of disadvantage (e.g., poverty, unemployment) illustrate how poor economic conditions, sources of strain, and blocked opportunities correlate to citywide levels of lethal violence over time. The use of principal components analysis to capture the combined variation of multiple indicators of a single concept has since become commonplace across scholarly research.

While research shows a relationship between social structure and violent crime in city neighborhoods, understanding why changes in poverty as well as population demography are related to violence at a structural level has been a key problem in criminological research. In agreement with a social disorganization framework and a cross-sectional research design, Krivo and Peterson (1996) found that higher rates of ethnic minorities often correlate to higher rates of violent crime. This more general finding has been established since the 1960s, and a number of sociological perspectives have attempted to explain it through a variety of theoretical perspectives, such as the theory of a subculture of violence (Wolfgang and Ferracuti, 1967) and the theory of neighborhood strain (Agnew 1992).

Liska and Bellair (1995) were among the first to challenge a key assumption that the relationship between ethnic minority levels and crime rates (including violent

crime rates) occurred in a unilateral direction (i.e., that higher levels of minorities led to higher violent crime levels). In fact the authors concluded that a reverse relationship between ethnic minority levels and crime seems to exist. More specifically, in their city-level analysis Liska and Bellair found evidence that higher violent crime rates preceded changes in the racial and ethnic composition of cities (e.g., an exodus of white residents, combined with a growth of ethnic minorities, often occurred after crime had already begun to increase). Moreover, Hipp (2011) relied on a longitudinal panel research design and extended this inquiry to the neighborhood level, where he found that white residents are seemingly more likely than minority residents to escape neighborhoods with increasing violent crime, and thus are more likely than ethnic minorities to avoid moving into neighborhoods with higher levels of violent crime. In short, white residents, according to Hipp (2011: 428) “avoid violent crime neighborhoods as much as possible,” particularly by comparison with nonwhite residents.

The importance of this research from a measurement and analytic standpoint is that it demonstrates how sequential theories and explanations of violent crime that rely on the use of cross-sectional data (i.e., data taken at one point in time) have the serious potential to lead to inconclusive, ambiguous, and altogether biased conclusions. Thus the use of longitudinal data collection strategies, research methodologies, and analytic techniques has become quite commonplace in contemporary crime and place research. Perhaps nowhere is this better illustrated than in crime in microgeographic contexts such as hot spots and street segments.

The examination of microcrime contexts centers on the concentration of specific locations such as addresses, street segments, or crime clusters (i.e., hot spots) within larger social environments such as communities and neighborhoods. These places have been shown to make up a disproportionate level of criminal offending. Earlier cross-sectional research shows that a very significant clustering of overall crime occurs in a small number of areas. In Minneapolis for example, over half of all calls to police services were found to be concentrated in less than 5 percent of locations within the city (Sherman, Gartin, and Buerger, 1989). Extending the intersection between crimes and geographic context further, Sherman and Weisburd (1995) were also among the first to demonstrate the heterogeneous nature of crime at different places – namely that most locations have none to very few crimes, while certain locations consistently experience serious crime-clustering – including clusters of violent crime.

The practical and theoretical implications for focusing resources on hot spots was called into question by Spelman (1995), who argued that, if hot spots of crime simply shift rapidly from place to place over time, it is far too difficult to understand the process and focus crime control resources on such locations. From a methodological standpoint, the reliance on cross-sectional data would never allow for a more thorough understanding of the elements of stability and change in these social processes. Longitudinal research designs therefore became necessary in order for these empirical limitations to be addressed. Thus studies that focused on the intersection of crime and place began to utilize the same longitudinal and developmental-trajectory analytical methods that had been employed to assess individuals’ risk of offending.

By drawing upon longitudinal data from over 14 years of crime incidents recorded in street segments in Seattle, Washington, Weisburd et al. (2004) found that roughly 84 percent of street segments had extremely stable trajectories of crime. Thus crime is not only concentrated at a small number of places, but also stable in most places as well. Additionally, Braga, Papachristos, and Hureau (2010) demonstrated the concentration of gun violence in microplaces by showing that, in over 30 years, less than 3 percent of street segments and intersections in the city accounted for over 50 percent of all gun violence incidents in Boston, Massachusetts. In essence, violent crime at microplaces does not appear to fluctuate in either a random or a systematic way; rather its underlying causes seem to facilitate similar levels of violence over time.

Many of the longitudinal studies of place relied on the use of growth curve estimation and group-based trajectory analysis (GBTAs) as the analytic techniques that accounts for both change and continuity in behavior over time. The use of GBTA was first introduced by Nagin and Land (1993) in order to model developmental patterns of individual criminality. The primary assumption of GBTA is that patterns of observations of interest over time can be approximated with a discrete number of groups characterized by polynomial growth curves (Nagin, 2005). Specifically, GBTA is designed to identify latent groups of individuals (or places) with similar developmental pathways. When modeling the developmental pathways, GBTA allows individuals to follow different trajectories on the basis of observed values. This approach allows the researcher to approximate developmental processes in a dynamic way rather than in the traditional, static way, which makes GBTA quite attractive for researchers interested in understanding long-term trends. As an analytical approach, it allows researchers to compare differences in the stability and continuity of offending patterns over time, across individuals or across different geographic contexts. GBTA has been adapted to model in a similar way the distribution of crime at specific microplaces (Weisburd et al., 2004), as well as at large-scale macroplaces such as neighborhoods (Griffiths and Chavez, 2004) and cities (McCall, Land, and Parker, 2011).

We see both that violent crime is nonrandomly distributed over space and that the factors leading to violence appear to be quite stable across geographic contexts. Additionally, from a public policy standpoint, if violence is heavily concentrated and stable in specific places, implementing the most promising violence reduction strategies will often entail the use of a geographic component. Indeed, the most effective violent crime strategies attempt to disrupt the intersection of high-risk offenders and high-risk contexts.

Criminal Justice Strategies Designed to Reduce Violent Crime

While the evidence for crime prevention benefits across specific components of the criminal justice system has historically been mixed (Durlaf and Nagin, 2011), an emerging body of evidence has amassed that highlights the utility of strategic and focused policing interventions. In 2004 the National Academy of Sciences (NAS)

reported that the strongest evidence for the impact of policing on crime relates to law enforcement strategies that are highly focused on specific crime problems (see Weisburd and Eck, 2004). A series of meta-analyses indicates that other types of highly diverse, concentrated, and comprehensive police-led strategies has the potential to significantly reduce the risk of violence in places that are high on crime and among groups of offenders with a propensity toward violence (Braga, Papachristos, and Hureau forthcoming; Braga and Weisburd, 2012; Weisburd et al., 2010).

A comprehensive violence reduction strategy requires the use of detailed data collection, analysis, and interpretation in order to guide the necessary planning phases that precede a specific focus on underlying violent crime problems. The present section highlights how police take into account information gleaned from the various overlapping units of analysis discussed earlier (incidents, places, individuals, and groups) in order to appropriately guide police strategies. Certainly, it is not feasible to review all known police-led initiatives that focus on these dimensions and aim to reduce violence. In order to illustrate how law enforcement has relied on data collection strategies for the reduction of violent crime risk, only a few prominent targeted strategies are highlighted here.

In New York City (NYC), CompStat was implemented in 1994 by then Chief William Bratton, in part as a possible approach to addressing the record number of homicides that the city experienced in the early 1990s. The NYC police department used crime mapping to identify locations within the city that were experiencing both serious (i.e., violent) and minor nuisance offenses. The organizational strategy held commanders in the various precincts accountable for developing solutions to serious crimes (Kelling and Sousa, 2001). The mapped data were intended to help officials develop coordinated plans for addressing those problems. Weekly CompStat meetings were attended by commanders of all precincts, police service areas, and operational unit divisions. During the presentation at the CompStat meetings, executive staff members probed commanders about crime and arrest activity as well as about specific cases (i.e., incident-based analyses), in order to assess whether there were underlying themes that linked different incidents to a deeper crime problem. The CompStat framework has since become widely adopted among urban US police agencies across the country (Kelling and Coles, 1996).

Kelling and Sousa (2001) found a relationship between misdemeanor arrests (a key component in the broader NYC police strategy of addressing minor offenses in order to reduce more serious types of crime) and decreases in violent crime. The authors also included measures of drug involvements, unemployment, and age composition changes in their analyses in order to assess whether any changes in violent crime in New York occurred above and beyond these other confounding factors and might have led to changes in crime. However, their evaluation design only looked at changes in crime observed in NYC.

Comparatively, Harcourt (2001) found that the change in NYC's violent crime rate was very consistent with similar reductions in violence encountered in San Diego, San Antonio, Houston, San Francisco, Los Angeles, and other large urban cities that had not implemented similar police reforms. A comparative analytical

approach that relied on a quasi-experimental design – namely a comparison of crime trends in NYC with crime trends in other cities, which did not experience the same type of stop-and-frisk policing – was a strong methodological evaluation improvement. Ultimately the results obtained through this method called into question just how much of an effect CompStat policing had, when other cities registered declines in violence in the absence of the same police-led strategy. A host of additional studies have relied upon the counterfactual design when assessing the strategy and almost all agree that CompStat likely had some impact on overall NYC violence, although it remains unclear just how much (Harcourt, 2001; Rosenfeld, Fornango, and Baumer 2005; for a critical assessment of this evaluation approach, see Berk, 2005). Thus, when examining the impact of a police-led intervention within a targeted geographic context, it is important to assess whether comparable contexts minus some type of intervention also experienced similar changes in violence. Such a design provides more confidence that a given police-led approach was at least partially responsible for changes in violence.

Another police-led strategic approach to violence reduction that channels resources to underlying problems is the development of multiagency violent crime incident reviews. The NAS Panel on the Understanding and Control of Violent Behavior found through research on problem-oriented policing initiatives that modified places and changes in routine activities could contribute much to the understanding and control of violence (Reiss and Roth, 1993). Problem-oriented interventions arise from diagnoses of problems and from responses that are developed accordingly. Strategic problem analysis is a tool of problem-oriented policing and involves collecting and analyzing data on the nature of homicide and other types of interrelated violence in order to identify and understand event characteristics.

For example, in Boston, Massachusetts a working group of researchers, law enforcement officials, state and federal prosecutors, correctional officials, social service providers, and religious and community leaders worked in tandem to address youth gang homicide. More specifically, the Boston strategy was also designed to reduce gang and gun violence by using two deterrence-based strategies (Braga et al., 2001). First, target enforcement efforts were utilized against gun traffickers who were supplying illegal firearms in locations with a history of gun incidents. Second, highly active and violent youth gangs were summoned by the police to “call-in” sessions designed to make them aware of the specific penalties that would be leveraged against them individually (maximum prosecution, the use of federal prosecution where applicable, and no chance of community corrections) if any member of the group were to continue to engage in serious violence after the notification session.

As a way to convey the deterrent-laden message, law enforcement and prosecutors explained to groups of notified gang members that any further engagement in serious violence would force officials to “pull every lever” legally available in order to punish gang members (Kennedy, 1997, p. 463). These notification sessions were often held publicly in crime-stricken communities (e.g., neighborhood churches) in order to illustrate a collective public response to the violence (see Kennedy, 2009). The overall goal of Operation Ceasefire was to deter from violent crime by increasing

the certainty and severity of punishment – but only in highly focused contexts, namely with chronic and violent groups of offenders.

The Boston Ceasefire strategy correlated with declines in citywide levels of youth homicide by roughly 63 percent after implementation (Braga et al., 2001). While some studies have questioned the specific magnitude of the Ceasefire effect on levels of youth homicide and gun violence within the city (Rosenfeld et al., 2005), a number of additional sites have since replicated the approach, and a series of evaluations have provided further evidence of a significant impact on violent crime (Braga et al., 2008; Engel, Tillyer, and Corsaro, 2013; McGarrell et al., 2006; Papachristos, Mearns, and Fagan, 2007). Thus there is evidence that a comprehensive analysis of individuals, groups (gangs), places, and incidents can lead to promising results in terms of an impact on violent crime. In short, the various units of analysis presented here have the ability to inform theory as well as practice and policy.

Conclusion

Violent crime is a multidimensional concept. Violent crime incidents involve an intersection of people, groups, and places. Among individuals at risk for violence, there appear to be developmental pathways that lead to an increased likelihood of violent crime offending, as well as to other, more general types of crime. There is also a group dynamic to violence. High-risk individuals can be influenced by groups such as gangs, which cause the likelihood of both violent offending and victimization to increase exponentially while they are in a gang. At a geographic level, there are specific structural conditions such as resource constraints that correlate to violent crime incidents over time. Thus a contextual understanding of violence is critical. Theoretical explanations and practical policy approaches that aim to address violence must rely on a comprehensive analysis of incidents in order to assess the overlap among these various concepts. When this happens, we see strong evidence that analyzing detailed narratives about individuals, groups, places, and events can help law enforcement craft specific responses, which reduce the risk of violent crime. It is also highly likely that data collection strategies, measurement and analytical issues, and policy approaches that focus specifically on violent crime will continue to be at the forefront of future criminological research.

References

- Agnew, R. 1992. Foundation for a general strain theory of crime and delinquency. *Criminology*, 30: 47–87.
- Anderson, E. 1999. *Code of the street: Decency, violence, and the moral life of the inner city*. New York: Norton.
- Becker, H. S. 1963. *Studies in the sociology of deviance*. New York: Free Press.
- Berk, R. A. 2005. Knowing when to fold 'em: An essay on evaluating the impact of ceasefire, compstat, and exile. *Criminology and Public Policy*, 4: 451–466.

- Braga, A. A., Kennedy, D. M., Waring, E. J., and Piehl, A. M. 2001. Problem-oriented policing, deterrence, and youth violence: An evaluation of Boston's Operation Ceasefire. *Journal of Research in Crime and Delinquency*, 38: 195–226.
- Braga, A. A., Papachristos, A. V., and Hureau, D. M. 2010. The concentration and stability of gun violence at micro-places in Boston, 1980–2008. *Journal of Quantitative Criminology*, 26: 33–53.
- Braga, A. A., Papachristos, A. V., and Hureau, D. M. Forthcoming. The effects of hot spots policing on crime: An updated systematic review and meta-analysis. *Justice Quarterly*.
- Braga, A. A., Pierce, G. L., McDevitt, J., Bond, B. J., and Cronin, S. 2008. The strategic prevention of gun violence among gang-involved offenders. *Justice Quarterly*, 25: 132–162.
- Braga, A. A., and Weisburd, D. 2012. The effects of focused deterrence strategies on crime: A systematic review and meta-analysis of the empirical evidence. *Journal of Research in Crime and Delinquency*, 49: 323–358.
- Bullock, H. A. 1955. Urban homicide in theory and fact. *Journal of Criminal Law, Criminology and Police Science*, 45: 565–575.
- Bureau of Justice Statistics, 2014a. Arrest data analysis tool. Accessed January 15, 2014. <http://www.bjs.gov/index.cfm?ty=datool&surl=/arrests/index.cfm#>.
- Bureau of Justice Statistics, 2014b. National victimization analysis tool. Accessed January 23, 2014. <http://www.bjs.gov/index.cfm?ty=nvat>.
- Capaldi, D. M., and G. R. Patterson. 1996. Can violent offenders be distinguished from frequent offenders? Prediction from childhood to adolescence. *Journal of Research in Crime and Delinquency*, 33: 206–231.
- Cernkovich, S. A., Giordano, P. C., and Pugh, M. D. 1985. Chronic offenders: The missing cases in self-report delinquency research. *The Journal of Criminal Law and Criminology*, 76: 705–732.
- Cohen, L. E., Kluegel, J. R., and Land, K. C. 1981. Social inequality and predatory victimization: An exposition and test of a formal theory. *American Sociological Review*, 46: 505–524.
- Cornish, D., and Clarke, R. V. 1986. Introduction. In *The reasoning criminal*, edited by D. Cornish and R. V. Clarke, 1–16. New York: Springer.
- Curry, G. D., and Spergel, I. A. 1988. Gang homicide, delinquency, and community. *Criminology*, 26: 381–406.
- Dean, C. W., Brame, R., and Piquero, A. 1996. Criminal propensities, discrete groups of offenders, and persistence in crime. *Criminology*, 34: 547–575.
- Decker, S. H. 1996. Collective and normative features of gang violence. *Justice Quarterly*, 13: 243–264.
- Decker, S. H., Bynum, T. S., and Weisel, D. 1998. A tale of two cities: Gangs as organized crime groups. *Justice Quarterly*, 15: 395–425.
- Decker, S. H., Melde, C., and Pyrooz, D. 2013. What do we know about gangs and gang members and where do we go from here? *Justice Quarterly*, 30: 369–402.
- Dobash, R. E., and Dobash, R. P. 1984. The nature and antecedents of violent events. *British Journal of Criminology*, 24: 269–288.
- Durlaf, S. N., and Nagin, D. S. 2011. Imprisonment and crime: Can both be reduced? *Criminology and Public Policy*, 10: 13–54.
- Engel, R. S., Tillyer, M. S., and Corsaro, N. 2013. Reducing gang violence using focused deterrence: Evaluating the Cincinnati Initiative to Reduce Violence (CIRV). *Justice Quarterly*, 30: 403–439.
- Farrington, D. P. 1986. Age and crime. *Crime and Justice: A Review of Research*, 7: 189–250.

- Felson, M. 2006. *Crime and nature*. Thousand Oaks, CA: Sage.
- Felson, R. B., and Steadman, H. J. 1983. Situational factors in disputes leading to criminal violence. *Criminology*, 21: 59–74.
- Goffman, E. R. 1967. *Interaction ritual: Essays on face-to-face behavior*. New York: Anchor Books.
- Gottfredson, M. R., and Hirschi, T. 1990. *A general theory of crime*. Stanford, CA: Stanford University Press.
- Griffiths, E., and Chavez, J. M. 2004. Communities, street guns, and homicide trajectories in Chicago, 1980–1995: Merging methods for examining homicide trends across space and time. *Criminology*, 42: 941–978.
- Harcourt, B. 2001. *Illusion of order: The false promise of broken windows policing*. Cambridge, MA: Harvard University Press.
- Hipp, J. R. 2011. Violent crime, mobility decisions, and neighborhood racial/ethnic transition. *Social Problems*, 58: 410–432.
- Hirschi, T., and Gottfredson, M. R. 1983. Age and the explanation of crime. *The American Journal of Sociology*, 89: 552–584.
- Hirschi, T., and Gottfredson, M. R. 1995. Control theory and the life-course perspective. *Studies on Crime and Crime Prevention*, 4: 131–142.
- Hughes, L. A., and Short, J. F. 2005. Disputes involving gang members: Micro-social contexts. *Criminology*, 43: 43–76.
- Kelling, G., and Coles, C. M. 1996. *Fixing broken windows: Restoring order and reducing crime in our communities*. New York: Free Press.
- Kelling G., and Sousa, W. H., Jr. 2001. *Do police matter? An analysis of the impact of New York City's police reforms*. Manhattan Institute Civic Report. Manhattan, NY: Manhattan Institute Center for Civic Innovation.
- Kennedy, D. 1997. Pulling levers: Chronic offenders, high-crime settings, and a theory of prevention. *Valparaiso University Law Review*, 31: 449–484.
- Kennedy, D. 2009. *Deterrence and crime prevention: Reconsidering the prospect of sanction*. New York: Routledge.
- Klein, M. W., and Maxson, C. L. 1989. Street gang violence. In *Violent crime, violent criminals*, edited by M. Wolfgang and N. A. Weiner, 198–234. Beverly Hills, CA: Sage.
- Krivo, L. J., and Peterson, R. 1996. Extremely disadvantaged neighborhoods and urban crime. *Social Forces*, 75: 619–650.
- Land, K. C., McCall, P. L., and Cohen, L. E. 1990. Structural covariates of homicide rates: Are there any invariances across time and social space? *The American Journal of Sociology*, 95: 922–963.
- Liska, A. E., and Bellair, P. E. 1995. Violent crime rates and racial composition: Convergence over time. *American Journal of Sociology*, 101: 578–610.
- Loeber, R. 1990. Development and risk factors of juvenile antisocial behavior and delinquency. *Clinical Psychology Review*, 10: 1–41.
- Luckenbill, D. F. 1977. Criminal homicide as a situated transaction. *Social Problems*, 25: 176–186.
- Macmillan, R. 2001. Violence and the life course: Assessing the consequences of violent victimization for personal and social development. *Annual Review of Sociology*, 27: 1–22.
- Maxson, C. L., and Esbensen, F.-A. 2012. The intersection of gang definition and group process: Concluding observations. In *Youth gangs in international perspective: Tales from the Eurogang program of research*, edited by C. L. Maxson and F.-A. Esbensen, 303–315. New York: Springer.

- McCall, P. L., Land, K. C., and Parker, K. F. 2011. Heterogeneity in the rise and decline of city-level homicide rates, 1976–2005: A Latent Trajectory Analysis. *Social Science Research*, 40: 363–378.
- McGarrell, E. F., Chermak, S., Wilson, J. M., and Corsaro, N. 2006. Reducing homicide through a “lever-pulling” strategy. *Justice Quarterly*, 23: 214–231.
- Melde, C., and Esbensen, F.-E. 2013. Gangs and violence: Disentangling the impact of gang membership on the level and nature of offending. *Journal of Quantitative Criminology*, 29: 143–166.
- Messner, S. F., and Tardiff, K. 1985. The social ecology of urban homicide: An application of the routine activities approach. *Criminology*, 23: 241–267.
- Miller, W. B. 1958. Lower class culture as a generating milieu of gang delinquency. *Journal of Social Issues*, 14: 5–19.
- Moffitt, T. E. 1993. Adolescence-limited and life-course persistent antisocial behavior: A developmental taxonomy. *Psychological Review*, 100: 674–701.
- Nagin, D. S. 2005. *Group-based modeling of development*. Cambridge, MA: Harvard University Press.
- Nagin, D. S. and Land, K. C. 1993. Age, criminal careers, and population heterogeneity: Specification and estimation of a nonparametric, mixed poisson model. *Criminology*, 31: 327–362.
- National Research Council (NRC). 1993. *Losing generations: Adolescents in high-risk settings*. Washington, DC: National Academy Press.
- Orbuch, T. L. 1997. People’s accounts count: The sociology of accounts. *Annual Review of Sociology*, 23: 455–478.
- Osgood, D. W., Johnston, L. D., O’Malley, P. M., and Bachman, J. G. 1988. The generality of deviance in late adolescence and early adulthood. *American Sociological Review*, 53: 81–93.
- Papachristos, A. V. 2009. Murder by structure: Dominance relations and the social structure of gang homicide. *American Journal of Sociology*, 115: 74–128.
- Papachristos, A. V., Meares, T. L., and Fagan, J. 2007. Attention felons: Evaluating project safe neighborhoods in Chicago. *Journal of Empirical Legal Studies*, 4: 223–272.
- Piquero, A. 2000. Frequency, specialization, and violence in offending careers. *Journal of Research in Crime and Delinquency*, 37: 392–418.
- Pizarro, J. M., and McGloin, J. M. 2006. Explaining gang homicides in Newark, New Jersey: Collective Behavior or Social Disorganization? *Journal of Criminal Justice*, 34: 195–207.
- Rand, M. R. 1994. *Violence-related injuries treated in hospital emergency departments*. Washington, DC: Bureau of Justice Statistics.
- Reiss, A. J., and Roth, J. A. 1993. *Understanding and preventing violence*. Washington, DC: National Academy Press.
- Robins, L., and Rutter, M. 1990. *Straight and devious pathways from childhood to adulthood*. Cambridge: Cambridge University Press.
- Rosenfeld, R., Fornango, R., and Baumer, E. 2005. Did ceasefire, compstat, and exile reduce homicide? *Criminology and Public Policy*, 4: 419–450.
- Sampson, R. J., and Lauritsen, J. L. 1990. Deviant lifestyles, proximity to crime, and the offender–victim link in personal violence. *Journal of Research in Crime and Delinquency*, 27: 110–139.
- Shaw, C. R., and McKay, H. D. 1942. *Juvenile delinquency in urban areas*. Chicago, IL: University of Chicago Press.

- Sherman, L., and Weisburd, D. L. 1995. General deterrent effects of police patrol in crime hot spots: A randomized controlled trial. *Justice Quarterly*, 12: 625–48.
- Sherman, L., Gartin, P., and Buerger, M. 1989. Hot spots of predatory crime: Routine activities and the criminology of place. *Criminology*, 27: 27–56.
- Short, J. F. 1997. *Poverty, ethnicity, and violent crime*. Boulder, CO: Westview Press.
- Smith, D. A. 1987. Police response to interpersonal violence: Defining the parameters of legal control. *Social Forces*, 65: 767–782.
- Smith, D. A., and Visher, C. A. 1981. Street-level justice: Situational determinants of police arrest decisions. *Social Problems*, 29: 167–177.
- Spelman, W. 1995. Criminal careers of public places. In *Crime and place: Crime prevention studies*, vol. 4, edited by J. E. Eck and D. Weisburd, 115–144. Monsey, NY: Willow Tree Press.
- Straus, M. A. 1979. Measuring intra-family conflict and violence: The conflict tactics scale. *Journal of Marriage and the Family*, 41: 75–88.
- Taylor, R. B., and Covington, J. 1988. Neighborhood changes in ecology and violence. *Criminology*, 26: 553–590.
- Thornberry, T. P., Krohn, M. D., Lizotte, A. J., and Chard-Wierschem, D. 1993. The role of juvenile gangs in facilitating delinquent behavior. *Journal of Research in Crime and Delinquency*, 30: 75–85.
- Weisburd, D., Bushway, S., Lum, C., and Yang, S.-M. 2004. Trajectories of crime at places: A longitudinal study of street segments in the city of Seattle. *Criminology*, 42: 283–321.
- Weisburd, D., and Eck, J. E. 2004. What Can the Police Do to Reduce Crime, Disorder and Fear? *Annals of the American Academy of Social and Political Sciences*, 593: 42–65.
- Weisburd, D., Telep, C. W., Hinkle, J. C., and Eck, J. E. 2010. Is problem-oriented policing effective in reducing crime and disorder? Findings from a Campbell systematic review. *Criminology and Public Policy*, 9: 139–172.
- Wolfgang, M. E., and Ferracuti, F. 1967. *The subculture of violence: Towards an integrated theory in criminology*. London: Tavistock Publications.

Furter Reading

- Bureau of Justice Statistics, 2014c. Gangs. Accessed February 14, 2014. <http://www.bjs.gov/index.cfm?ty=tp&tid=36>.
- Cohen, J. 1986. Research on criminal careers. In *Criminal careers and career criminals*, vol. 1, edited by A. Blumstein, J. Cohen, and C. A. Visher, 292–418. Washington, DC: National Academy Press.
- Miller, J. 2001. *One of the guys: Girls, gangs, and gender*. New York: Oxford University Press.
- National Research Council (NRC). 2004. Effectiveness of police activity in reducing crime, disorder and fear. In *Fairness and effectiveness in policing: The evidence*, edited by W. Skogan and K. Frydl, 217–251. Washington, DC: The National Academies Press.