TO KILL OR NOT TO KILL?
LETHAL OUTCOMES IN
INJURIOUS ATTACKS*

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This research explores the utility of the notion of lethal intent for understanding the outcomes of injurious attacks. We suggest that assailants sometimes kill rather than merely injure victims to avoid either retaliation or criminal prosecution. We hypothesize that, for these tactical reasons, offenders will be more likely to kill when they have no accomplices, when their victims are male or black, and when the victim can identify them. These hypotheses are tested with a merged data set containing information on homicides and nonlethal victimizations involving robbery, rape, and pure assault. The results of multiple logistic regression analyses are largely consistent with theoretical expectations.

Criminologists have adopted different perspectives with respect to the role of lethal intent in the etiology of homicide. At one end of the spectrum are those who question the prevalence of distinctive lethal intent and minimize its causal significance. For example, Block (1977:10) argues that "most killings are the outcome of either an aggravated assault or a robbery which somehow progressed beyond the degree of harm intended by the offender." While Block acknowledges that there are a "few well planned intentional homicides," he implies that these crimes typically evolve in an erratic and unintended way.

Zimring (1968, 1972) adopts a similar stance in his classic formulation of the thesis of "weapon instrumentality effects" to explain the association between lethal weapons and lethal outcomes in violent crimes. Zimring assumes that, in the vast majority of homicides, the offender does not possess an unambiguous or sustained intent to kill the victim. As a result, the death or survival of the victim of personal violence is largely a matter of chance, which depends in large measure on the lethality of the weapon used to inflict injury.1 Fatalities would presumably be reduced if other

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1. The survivability of the victim and access to timely medical care also play a role (Block, 1977; Doerner and Speir, 1986). See Wright et al. (1983) for a critique of the weapon instrumentality thesis, and Cook (1991) for a more sympathetic evaluation.
weapons were substituted for firearms because these other weapons ordinarily require more vigorous and sustained effort for killing the victim (Cook, 1991:14).

This skepticism about the prevalence and importance of distinctive lethal intent has been accompanied by the view that homicide is for all practical purposes identical in its dynamics to other forms of criminal violence. Harries (1990:48), for example, argues that "the legal labels ‘homicide’ and ‘assault’ represent essentially similar behaviors differing principally in outcome rather than process." Accordingly, Harries concludes that "the typical homicide is most appropriately considered a fatal assault" (p. 60).

An alternative perspective allows for distinctive causal dynamics in homicidal crimes associated with the formation of lethal intent. According to this point of view, a substantial portion of homicide offenders really do intend to kill their victims and not merely to injure them. The death of a victim, therefore, is not an incidental outcome that reflects extraneous considerations but rather is an integral part of the incident that is likely to be systematically related to other features of that incident (see, for example, Kleck, 1991:153–222; Reidel, 1993:13–14).

In this research, we explore the potential utility of the notion of lethal intent for an understanding of the causal dynamics of homicides. We begin by discussing the decision-making process in criminal violence in general and consider theoretical reasons why offenders might be motivated to formulate distinctively lethal intent. Our primary focus is on tactical concerns, that is, features of the incident that would make it more or less advantageous for criminal assailants to kill rather than merely injure their victims. Drawing on this theoretical discussion, we propose specific hypotheses about the effects of type of crime, gender, race, number of offenders, type of weapon, and victim-offender relationship on the likelihood of a lethal outcome, given that an injurious attack has occurred. These hypotheses are then tested in multivariate analyses with a merged data set of homicides and nonlethal victimizations involving injury. For purposes of comparison, we also examine the effects of the same set of independent variables on the likelihood of serious injury versus minor injury and on the likelihood of lethal outcomes versus serious injury, omitting incidents resulting in minor injury.

THE DECISION-MAKING PROCESS AND MOTIVATIONS TO KILL

To understand the decision to kill a victim requires an understanding of the causal processes underlying interpersonal violence more generally. Our approach to violence is predicated on the premise that violent acts
involve intentional action. (See Tedeschi and Felson, 1994, for a full exposition of this approach.) Intentions, moreover, encompass both expectations and values. Actors who intend harm expect harm to result from their actions, and they desire or value that harm.

While violent actions may sometimes appear to be purely impulsive and therefore lacking meaningful intent, we prefer to view these actions as the result of quick and sometimes careless decisions rather than involuntary behavior (Cornish and Clarke, 1986). The level of information processing may be limited in these encounters given the usually strong emotions and the constricted time frame requiring “split-second decisions.” Strong emotions (e.g., anger and fear) may also increase risk taking since they tend to focus the person’s attention on ongoing events rather than future consequences.

We further assume that people who engage in violent actions value either compliance or harm (Tedeschi and Felson, 1994). These outcomes are valued because they lead to more distal values, such as justice, a favorable self-image, money, or physical safety. Not all anticipated outcomes of violent encounters are valued, however. A robber usually values the victim’s compliance and the financial reward but is indifferent to the victim’s suffering. Harm to the victim is an outcome in many robberies, but it is usually not the offender’s goal. It is thus important to recognize that most behaviors have multiple outcomes, only some of which are desired by the actor.

Our approach differs from earlier approaches that distinguish between instrumental and angry aggression (e.g., Buss, 1961). In angry aggression the organism values harm as an end in itself because of its innate response to frustration or aversive stimuli (Berkowitz, 1989; Dollard et al., 1939). We view harm as a means to some end and all aggression as instrumental or goal-oriented action.

Offenders also consider costs in making decisions about the use of violence. Two types of costs are likely to be critical: those imposed by third parties and those imposed by the target. Target-imposed costs are those that can be inflicted on the initiator of a coercive interaction by the target. A critical consideration in the assessment of target-imposed costs in hostile encounters is that of “coercive power.” Coercive power refers to the capacity to force a change in behavior using threats of harm or actual harm (Tedeschi and Felson, 1994). Coercive power is affected by the skills and resources of the antagonists and their allies. Relative physical size and strength, the possession of weapons, and the support of allies—all affect the power equation.

The coercive power of actors in violent encounters can have contradictory effects on their behavior. On the one hand, coercive power encourages actors to use coercion because they anticipate that they will be
successful and that their costs will be low (Fischer, 1969; Hornstein, 1965; Kipnis and Schmidt, 1983). Their actions are also more likely to be harmful precisely because of their superior resources. At the same time, however, actors with high levels of coercive power are not very vulnerable to retaliation. Their invulnerability may weaken their incentive to use extreme forms of coercion, especially coercion that effectively incapacitates the victim.

An additional consideration in the decision-making process underlying violence is the probable costs imposed by third parties. The fear of punishment from legal authorities and more informal punishment may deter the use of violence and/or limit the level of violence. Given such considerations, offenders will typically choose locations and situations in which capable guardians are absent (Cohen and Felson, 1979). In addition, offenders are likely to take actions during a violent crime to avoid criminal prosecution.

The discussion above considers factors relevant to the use of any form of coercion in antagonistic encounters. It is also possible to draw upon this general theoretical framework to identify reasons why an offender might prefer to kill rather than simply harm (i.e., injure) the victim.

First, the desire to kill the victim may reflect concerns for justice and identity. Offenders may feel so angry or aggrieved at the victim that they desire the ultimate penalty. From their point of view, the victim “deserves to die.” The killing may reflect an attempt to demonstrate power, particularly when offenders feel they have been humiliated by the victim. Those theorists with a frustration-aggression approach might argue, in contrast, that the level of aggressive drive or negative effect reaches such a high level that the organism responds blindly in an extreme way.

Second, offenders may kill the victim for practical reasons. For example, drug dealers may kill competitors in order to acquire their territory. People may kill their spouses for insurance or inheritance, or to free themselves to become involved with someone else. Those involved in love triangles may kill their rivals in hopes of securing an exclusive relationship.

Third, offenders who kill their victims may be attempting to avoid target-imposed costs. Killing the victim prevents the victim from retaliating either immediately or at a later date. By permanently incapacitating the victim, offenders secure their own personal safety. They may, in other words, believe that it is “kill or be killed.” Fear of retaliation is likely to be greater when the victim has a high level of coercive power relative to the offender. Support for the notion that offenders kill victims with coercive power in order to avoid retaliation comes from research by Felson and Steadman (1983) that compared homicide and serious assaults. They report that offenders are more likely to kill victims when the victims are
armed. Presumably, one factor in offenders' decision to kill victims is to avoid being killed (or seriously harmed) themselves.

Finally, offenders may kill the victim to avoid costs from third parties. The victim is a potential witness whom offenders may kill in order to prevent identification and later criminal prosecution. An alternative scenario is that offenders may be deterred from killing the victim by the anticipation of a more severe sentence. Evidence suggests, however, that criminals pay more attention to certainty of punishment than severity (e.g., Tittle and Logan, 1973), and killing a victim decreases the certainty of punishment by eliminating the prospect of identification by the victim.\(^2\)

To summarize, offenders in injurious attacks might intend to bring about the death of their victims for several reasons: to resolve intense grievances, demonstrate power, eliminate rivals, make money, forestall retaliation, and prevent identification and subsequent prosecution. The last two reasons are tactical ones. The offender's goal is to avoid costs, a goal which may be well served by a lethal outcome. This lethal intent may be premeditated, or it may develop during the course of violent interaction.

**HYPOTHESES**

In principle, our perspective on the formation of lethal intent could generate a wide variety of hypotheses about the determinants of fatal outcomes. Available data sets, however, contain only a restricted number of variables that can be included in testable hypotheses. These variables include the gender and race of offenders and victims, the number of participants, the relationship between offenders and victims, the type of crime (i.e., incidents involving elements of robbery, rape, or "pure" assaults), and the type of weapon (if any) employed.

Our main dependent variable is whether incidents involving injuries produce a lethal outcome. We assume that the effects of our independent variables on the likelihood of a lethal outcome are mediated by lethal intent, which is an unmeasured variable. We recognize that some offenders have lethal intent but are unsuccessful, while others lack lethal intent yet produce a lethal outcome. Nevertheless, it seems reasonable to assume that the presence of lethal intent increases the likelihood of a killing, even though the association between intent and actual outcome is not perfect.

Considerations of fear of retaliation allow us to predict effects for the demographic characteristics of victims and the presence of multiple

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2. The reduced certainty of punishment associated with the elimination of the victim-as-witness is counterbalanced to some extent by the greater effort on the part of law enforcement officials to prosecute homicide cases in comparison with other assaults.
offenders. We hypothesize that an offender is likely to have greater fear of retaliation from a male victim than a female victim. In addition, a male victim is more likely than a female victim to take violent protective actions against the offender, according to data from the National Crime Victimization Survey (NCVS) (Bureau of Justice Statistics, 1992a:86). For tactical reasons, then, offenders should be more likely to kill male victims than female victims. It is possible that only female offenders are likely to fear male victims, which would imply that lethal outcomes would be more likely when the offender is female and the victim is male.

The race of the victim may also have an effect. To the extent that blacks are perceived as posing a greater threat of retaliation, greater fear of blacks would lead to more lethal outcomes for black victims. This fear could reflect either racial stereotypes or racial differences in the victim's behavior. The NCVS data suggest that black and white victims actually exhibit similar patterns of violent self-protective action (Bureau of Justice Statistics, 1992a:86), suggesting that stereotypes may play a greater role.

We also anticipate that single offenders will tend to be more fearful of retaliation than multiple offenders. Therefore, the presence of multiple offenders in an incident should reduce the likelihood that the victim will be killed.

As noted earlier, an additional tactical concern that might lead to the formation of lethal intent is identifiability. Strangers are less likely to be identifiable than nonstrangers, virtually by definition. We accordingly predict that, all other things being equal, victims are more likely to be killed by nonstrangers than by strangers.

Previous research clearly reveals that weapon type is an important determinant of lethal outcomes. We expect that the use of a gun or, to a lesser extent, a knife should increase the chances of a lethal outcome. These relationships can be attributed either to the greater lethality of guns and knives (the so-called weapon-instrumentality effect; see Cook, 1991) or the tendency of offenders with premeditated lethal intent to choose a more lethal weapon. Note that the predictions based on weapon instrumentality run counter to those that would be derived from considerations of retaliation alone. Armed offenders are likely to have less fear of retaliation from an injured victim than are unarmed offenders. Fear of retaliation should produce a negative effect of weapons on lethal outcomes, thereby offsetting part of the positive effect produced by motivational and weapon-instrumentality effects. Unfortunately, it is not possible to sort out these causal processes with the available data.

Our argument concerning the preference for harm provides a rationale for hypothesizing a relationship between type of crime and fatal outcomes. We predict that victims are more likely to be killed in a pure assault than in a robbery because offenders are more likely to have a lethal intent.
Assault offenders are more likely to value harm—including the ultimate harm, death—while robbers are more likely to value compliance. From the point of view of frustration-aggression theorists, pure assault is more likely to involve angry aggression, while robbery is more likely to involve instrumental aggression. In most robberies, the offender should have no desire to harm or kill the victim except when such harm facilitates the primary goal of securing property. Consistent with this argument, Block (1977:31) found that 1% of robberies and 6% of aggravated assaults resulted in death to the victim. We are uncertain what to predict for rape. If rapists want compliance, they should behave more like robbers. If harm is their goal, they should behave more like assault offenders.

We can also examine statistical interactions between the use of lethal weapons and the type of crime. Given the assumption that offenders are more likely to value harm in pure assaults than in robbery, type of crime can be used as a proxy for the motivation to harm the victim. Evidence consistent with our predictions about type of crime would support this assumption, that is, evidence that pure assaults are more likely to have lethal outcomes than the other crime types.

Two competing hypotheses can be made, then. According to a compensation hypothesis, offenders who are determined to kill the victim will be likely to do so regardless of the type of weapon they use. If less lethal weapons require more effort, they will engage in more effort. Offenders who have lethal intent will select a gun, and if they have no gun, they will compensate; the weapon does not matter to the determined offender. For robbers, who are less likely to have lethal intent, the lethality of the weapon will be the determining factor of death. According to this reasoning, the effect of a lethal weapon should be weaker in pure assaults, where there is greater lethal intent, than in robberies. We cannot examine weapon effects on lethal outcomes in rape with these data because such outcomes are so rare.

An alternative possibility is that lethal weapons facilitate a lethal outcome for offenders who are motivated to harm the victim. According to the weapon facilitator hypothesis, offenders who value harm will produce more of it when they have lethal weapons. Offenders who desire to kill the victim will find it easier to do so with a more lethal weapon. According to this reasoning, the effect of a lethal weapon should be stronger in pure assaults than in robberies or rapes.

Finally, we include in our models the offenders' gender and race, even though it is unclear how these characteristics will affect the outcome. With respect to gender, opposing predictions can be derived. On the one hand, males tend to be more violent than females, physically bigger and stronger, and more skilled at violence. These considerations suggest that males will be more likely to kill their victims. On the other hand, male
offenders may be less vulnerable to retaliation than female offenders, so they have less incentive to kill the victim. We accordingly make no a priori prediction about the effect of the offender’s gender. Similarly, there are no strong theoretical grounds for predicting distinctive effects of race of offender. While the evidence indicates a relationship between race and involvement in criminal violence in general (Harries, 1990), our focus is on the conditional probability of death given that an injury has been inflicted. The gender and race of the offender are nevertheless included in the analyses as control variables.

Suggestive support for some of our hypotheses can be found in previous research by Kleck (1991). Kleck examines the effects of several of the independent variables cited above on the probability of death for selected homicide and nonlethal incidents involving injury. He finds that the use of guns and knives and the presence of black victims increase the chances of lethal outcomes. A numerical advantage for offenders (more offenders than victims) decreases this probability (Kleck, 1991:213). These findings are consistent with our hypotheses.

Kleck’s research, however, is limited in a critical respect: He examines only cases involving strangers. He does so out of concern for the known response bias associated with violence among intimates in victimization surveys (1991:177). An obvious limitation of Kleck’s selection criterion is that it makes it impossible to assess the effects of offender-victim relationship on outcome. More important, such a procedure entails severe sample biasing with respect to homicide. A clear majority of homicides involve nonstrangers. To illustrate, stranger homicides made up only about 15% of homicides with a known relationship (8% of all homicides) in 1989.3 Excluding nonstranger homicides thus results in the exclusion of the most common types of homicide. We accordingly examine homicide incidents involving both nonstrangers and strangers, although we recognize potential response and selection biases and anticipate their effects where possible. We also examine interactions between victim-offender relationship and other predictors to see if their effects differ for incidents involving strangers versus those involving nonstrangers.

SUPPLEMENTARY ANALYSES

Our interpretation of the determinants of lethal outcomes relies on

3. These data are based on the Federal Bureau of Investigation’s (FBI’s) Supplementary Homicide Reports (SHR). As Reidel (1993:19–51) explains, the SHR data source is likely to underestimate stranger homicides in comparison with local police sources. Nevertheless, the local police data also indicate that “stranger” homicides represent a distinct minority of homicides. Reidel (1993:50–51) reports an average estimate of stranger homicides across a sample of cities of about 25%. 
inferences about the offender's decision to kill the victim, primarily for tactical reasons. An alternative possibility is that killing is simply an intense, aggressive response governed by the seriousness of the grievance or by irrational factors. To assess this possibility, we compare determinants of seriousness of injury for nonlethal incidents to the determinants of lethal outcomes. If killing reflects the tactical factors we have suggested, the effects of variables on lethal outcomes should differ in certain respects from those predicting a serious but nonlethal injury. On the other hand, if seriousness of injury and lethal outcomes have the very same determinants, other explanations, not involving the hypothesized tactical concerns, are indicated.

We also eliminate incidents involving mild injuries from some of our analyses. This strategy reflects a concern that sampling biases may affect the nonlethal assault sample. Such biases are likely to be weaker for the most serious assaults.

The hypotheses described above focus on the direct effects of predictors on lethal outcomes. It is also possible that weapon choice mediates the effects of other variables. As Kleck (1991) observes, offenders with lethal intent are more likely to select a lethal weapon. Offenders may also choose weapons for other tactical reasons. They may use guns when they are concerned about the victim retaliating. Thus, a robber's choice of weapon depends on the vulnerability of the target (Letkemann, 1973). Kleck (1991:157) found, in cross-tabular analyses, that homicide offenders are more likely to use guns when they are alone rather than in groups and when the victim is male rather than female. To examine the role of these factors in choice of weapon, we will look at determinants of gun use in addition to the determinants of lethal outcomes. We predict that, for tactical reasons, offenders who face males, or blacks, or who act alone will be more likely to use a gun.

DATA AND METHODS

Our data collection procedures are modeled on the innovative strategy devised by Kleck (1991; see also Kleck and McElrath, 1991). Kleck's research is unique "in combining nationally representative samples of both fatal and nonfatal violent incidents in a single analysis" (Kleck, 1991:174). The basic logic underlying this approach is straightforward: victimization data on nonlethal incidents are taken from the National Crime Victimization Survey and merged with the national data on "homicides known to the police" as recorded in the FBI's Supplementary Homicide Reports (SHR).

The NCVS provides estimates of victimizations from nationally representative samples of the U.S. population ages 12 and over. Respondents
are asked a series of screening questions to determine whether they experienced any criminal victimization during a six-month period prior to the month of the interview (Bureau of Justice Statistics, 1992b:v–vi). Those respondents who report victimizations are then asked for details about them. Among these details is the question of whether respondents suffered any injuries. If so, respondents are asked to describe the nature of the injuries and the type of medical care that they received (if any) to treat the injuries. We select for the analysis only those victimization incidents that resulted in some injury. Because incidents with injury are relatively uncommon, and because the NCVS is based on sample data, we pool victimization incidents over a multiyear period, 1987–1991, to ensure sufficient numbers of cases for multivariate analyses. (At the time of data collection, only incidents for the first two quarters of 1991 were available for analysis.)

We further classify these nonlethal injuries on the basis of seriousness. As noted above, this allows us to compare the determinants of lethal outcomes with the determinants of serious, nonlethal injuries. It also permits an investigation of whether the factors predicting a lethal outcome, given any injury, are similar to those predicting a lethal outcome, given a serious injury. The criterion for identifying a “serious” nonlethal injury is the respondent’s report that the injury required medical treatment.

Incidents involving lethal violence are taken from the SHR in 1989 (the mid-point of the 1987–1991 period). To maintain comparability with the types of violent encounters covered by the NCVS, we exclude homicides involving victims younger than 12 years of age and those classified as negligent manslaughters or justifiable homicides. Victimization that occurred outside the United States are excluded for similar reasons (see Kleck, 1991:177).

The nonlethal incidents involving injury reported in the NCVS samples and the homicides in the SHR are then combined into a single data set and weighted. Weighting is performed to adjust the frequencies of lethal and nonlethal incidents to reflect the estimated proportions of the respective incidents for the nation at large. An estimate of the annual number of

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4. Limiting the analysis to incidents involving injury raises the issue of sample selection bias. Following Heckman (1979) and Berk (1983), a common procedure for dealing with this problem is to estimate a “correction factor” reflecting the predicted probability of inclusion in the sample and entering this factor into the “substantive equations” (see Kleck, 1991:178). Research by Stolzenberg and Relles (1990) using Monte Carlo simulations has questioned the “mechanical” application of this procedure; the authors note that “the method can easily do more harm than good” (p. 408). In view of these methodological concerns, and given that our substantive interest lies in injurious incidents and not all assaultive incidents, we do not apply the Heckman–Berk corrections.
nonlethal victimizations involving injury is obtained by computing the weighted total of such incidents in the NCVS data (using the NCVS weights) and dividing by 4.5 (reflecting 1987–1990 and the first two quarters of 1991). This figure is added to the number of homicides reported in the 1989 SHR to yield an estimate of the total annual number of injurious victimizations (after the exclusions noted), lethal and non-lethal. We assume that the number of homicides reported to the police is a reasonable indicator of the actual total, although some homicides obviously go unreported. Moreover, following Reidel (1993:30), we assume the SHR provides a reasonably complete recording of homicides known to local police agencies.

The results indicate that an estimated 1,654,376 injurious attacks of persons aged 12 and over occur annually, of which approximately 99% are nonlethal and 1%, lethal. Weights were constructed to yield a sample reflecting these relative frequencies of the different kinds of incidents. This weighted sample was “normed” so that the weighted “N” was identical to the actual number of incidents in the merged data set (see Frankel, 1983:46). We have also conducted analyses without weighting. The signs of the coefficients and levels of statistical significance in the unweighted analysis are similar to those reported below for the hypothesized predictors of lethal outcomes. Hence, our principal substantive conclusions are unaffected by the weighting procedure.

INDEPENDENT VARIABLES

One of the hypothesized predictors of a lethal outcome is type of crime. In the NCVS, respondents who report an unlawful physical attack are asked whether the incident involved additional criminal elements, such as completed or attempted theft (robbery), involuntary sexual contact (rape), or unlawful entry of a residence (burglary). We exclude burglaries from the analysis because there are so few and because their motivational dynamics are likely to be different from those of other incidents. For the other two crime types, we construct dummy variables to reflect whether a robbery or rape element was involved in the incident. Analogous procedures are applied to the homicide incidents using the variable for “circumstance.”

The reference category for these dummy variables is “pure assault,” that is, assaultive incidents with injury that do not contain elements of other felonious activity.

5. The “circumstance” variable in the SHR enumerates detailed categories for “felony type” and “other than felony type” homicides. The felony categories for “rape” and “robbery” are used to construct the respective dummy variables, while “burglary” and all other felony-type homicides are excluded for reasons explained in the text. The circumstance classification is based on the “first offender,” which is assumed to reflect the principal circumstance surrounding the incident.
All of the other independent variables are also treated as dummy variables. Incidents with multiple offenders are scored 1, and single-offender incidents are scored 0. With respect to gender and race, the following scores are assigned: female = 0, male = 1; nonblack = 0, black = 1. The coding of these demographic characteristics is straightforward for incidents involving a single victim and a single offender and for incidents with multiple offenders/victims of the same gender or race. For incidents involving multiple victims and/or offenders of mixed gender, the gender variable is coded to reflect the presence of a male. Thus, for example, an incident involving both a male and a female victim is coded "male" on victim gender. The rationale here is to have the coding scheme reflect the presence of the attribute reflecting higher coercive power, and males are assumed to have higher coercive power due to greater physical strength and experience with violence. For race, the category representing power advantage is indeterminate. We accordingly exclude incidents involving multiple offenders or multiple victims of mixed race (which are relatively rare).

A similar logic is used in the coding of victim-offender relationship. In incidents with a single victim and a single offender, this variable is based on the relationship between those two parties and is coded as follows: nonstranger = 0; stranger = 1. For multiple offender/victim incidents, the most intimate relationship between any offender and any victim is coded. Finally, dummy variables are created representing the presence of the following weapons: gun, knife, blunt object, or other weapon. The reference category for these dummy variables is "no weapon."

STATISTICAL PROCEDURES

Four dependent variables are considered at various stages of the analysis: death vs. any injury; death vs. serious injury; serious (nonlethal) injury vs. nonserious injury; and the presence of a gun vs. no gun present. Given the dichotomous nature of these variables, we employ logistic regression to estimate the effects of the predictor variables (Hanushek and Jackson, 1977). The logistic regression coefficients indicate the change in the log odds of a given outcome for a dependent variable associated with switching from one category of the independent variable to the other. These coefficients can also be expressed in terms of an odds ratio (equal to $e^b$). To facilitate the interpretation of the odds ratio, we express it in terms of increased (rather than decreased) risk of an outcome, reversing the sign of the logistic regression coefficient when required. In evaluating the statistical significance of logistic regression coefficients, we use one-tailed tests when the direction of the relationship is predicted and two-tailed tests otherwise.
DATA LIMITATIONS

Before turning to the results, it is important to acknowledge limitations associated with the data. A particularly problematic feature of the NCVS is underreporting bias, particularly for assault and rape (e.g., Murphy and Dodge, 1981). This implies that the level of nonlethal incidents will be underestimated relative to lethal incidents in the data set. We expect that this underreporting bias is less for the specific type of violent incidents under investigation—those involving injury—than it would be for incidents with no injury. The bias should be even weaker in the analyses limited to serious nonlethal injuries (those requiring medical treatment).

A particularly frustrating problem associated with the use of SHR data is that of extensive missing values (see Reidel, 1989). Information on the characteristics of offenders and features of the incident that presuppose information about offenders is likely to be missing. The most severe biases are likely to occur for the variable reflecting the relationship between victim and offender (stranger/nonstranger) because the biases of the NCVS and the SHR are compounded. Research has shown that incidents involving family members tend to be underreported in the NCVS (Turner, 1981). Consequently, the proportion of stranger incidents in the nonlethal data set is likely to be artificially high. In the SHR, on the other hand, stranger homicides are probably underestimated because of the greater difficulty in solving these kinds of cases and identifying an offender. The joint effect of such biases would be to create an artifactual relationship between victim-offender relationship and lethality of outcome—stranger incidents would appear to have a lower probability of death. Unfortunately, this artifactual relationship is in the same direction as our hypothesized relationship. Hence, any results involving the variable “stranger/nonstranger” must be interpreted cautiously.

There is no entirely satisfactory solution to the problem of missing data on homicide incidents. We can nevertheless explore the potential implications of sample attrition by comparing the effects for those variables with little missing data, such as victim characteristics and weapon type, across two samples: (1) the maximum sample that can be used with a model limited to the predictors with little missing data and (2) the smaller

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6. Kleck (1991:475-476) attempts to deal with this problem by creating “undetermined” dummy variables. This procedure involves coding all missing data as zero, and for each of the variables for which there are missing data, assigning a score of 1 to a corresponding “undetermined” variable for those cases with missing values. Including such variables in the equations then indicates whether the missing data pattern for a variable is systematically related to the dependent variable under examination. We have estimated our main models using such undetermined dummy variables. The effects of the independent variables in these analyses are highly similar to those reported below.
subsample that must be used to estimate the complete model. If the effects can be shown to be similar, we will have greater confidence that biased sampling is not seriously distorting our results.

RESULTS

A frequency distribution for the merged, weighted sample is presented in Table 1. Note that the distribution for the primary dependent variable—"incident outcome"—reflects the highly skewed proportions of the two kinds of incidents, as estimated for the U.S. population at large. Continuing down Table 1, the percentages for robbery and rape indicate that the presence of these criminal elements is relatively uncommon in comparison with the frequency of pure assaults, the omitted category for the offense dummy variables. Injurious incidents involving nonstrangers and single offenders are relatively more frequent than those involving strangers and multiple offenders. The proportions of incidents with female and male victims are roughly equivalent, whereas incidents with male offenders are much more common than those with female offenders. The majority of incidents involve nonblack victims and offenders. Finally, incidents with knives are the most common type of incident with a weapon, followed by blunt objects, "other" weapons, and guns, in descending order. The majority of incidents fall into the omitted weapon-type category of "no weapon."

Logistic regressions are presented in Table 2. In the first column of the table, we present equations that predict whether the victim is killed or injured. We hypothesize that victims are less likely to be killed in a robbery than in a pure assault because robbery offenders are less likely to value harm to the victim. This hypothesis is supported. The logistic regression coefficient for the robbery dummy variable is negative and statistically significant ($b = -1.32$). Expressed in terms of the odds of the increased risk of pure assaults versus the other offense categories, offenders are 3.74 times more likely to kill the victim in a pure assault than in a robbery. Incidents involving rape also entail a reduced likelihood of a lethal outcome ($b = -2.23$), although the effect is not statistically significant. Offenders are 9.3 times more likely to kill the victim in a pure assault than in a rape. The failure to achieve significance with such a strong effect may be due to the fact that there are relatively few rapes in the sample and the fact that lethal outcomes in rape are so rare.

We also hypothesize that offenders are more likely to kill the victim if the victim is male or black or if the offender is alone. In these instances, we assume the offender's fear of retaliation is greater. All three of these hypotheses are supported. Offenders are 4.4 times more likely to kill male victims than female victims ($b = 1.49$), and they are 2.5 times more likely
Table 1. Frequency Distribution (N = 12,471)

<table>
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<th>Variable</th>
<th>Percent</th>
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<td>Death</td>
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<tr>
<td>Victim-Offender Relationship</td>
<td></td>
</tr>
<tr>
<td>Nonstranger</td>
<td>65.0</td>
</tr>
<tr>
<td>Stranger</td>
<td>35.0</td>
</tr>
<tr>
<td>Number of Offenders</td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>75.4</td>
</tr>
<tr>
<td>Multiple</td>
<td>24.6</td>
</tr>
<tr>
<td>Victims’ Sex</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>48.2</td>
</tr>
<tr>
<td>Male</td>
<td>51.8</td>
</tr>
<tr>
<td>Offenders’ Sex</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>11.5</td>
</tr>
<tr>
<td>Male</td>
<td>88.5</td>
</tr>
<tr>
<td>Victims’ Race</td>
<td></td>
</tr>
<tr>
<td>Nonblack</td>
<td>83.6</td>
</tr>
<tr>
<td>Black</td>
<td>16.4</td>
</tr>
<tr>
<td>Offenders’ Race</td>
<td></td>
</tr>
<tr>
<td>Nonblack</td>
<td>69.8</td>
</tr>
<tr>
<td>Black</td>
<td>30.2</td>
</tr>
<tr>
<td>Presence of Gun</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>93.7</td>
</tr>
<tr>
<td>Yes</td>
<td>6.3</td>
</tr>
<tr>
<td>Presence of Knife</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>89.8</td>
</tr>
<tr>
<td>Yes</td>
<td>10.2</td>
</tr>
<tr>
<td>Presence of Blunt Object</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>91.6</td>
</tr>
<tr>
<td>Yes</td>
<td>8.4</td>
</tr>
<tr>
<td>Presence of Other Weapons</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>92.3</td>
</tr>
<tr>
<td>Yes</td>
<td>7.7</td>
</tr>
</tbody>
</table>

NOTES: Percentages are based on weighted counts. The weighted n is normed to reflect the actual sample size.
Table 2. Logistic Regressions for Incident Outcomes and Gun Use

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Any Injury vs. Death</th>
<th>Injury with Medical Care vs. Death</th>
<th>Minor Injury vs. Injury with Medical Care</th>
<th>Gun vs. No Gun</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robbery</td>
<td>-1.32*</td>
<td>-1.26*</td>
<td>-.19</td>
<td>.36*</td>
</tr>
<tr>
<td>Rape</td>
<td>-2.23</td>
<td>-2.28</td>
<td>.29</td>
<td>.86*</td>
</tr>
<tr>
<td>Male Victims</td>
<td>1.49*</td>
<td>1.33*</td>
<td>-.04</td>
<td>.67*</td>
</tr>
<tr>
<td>Black Victims</td>
<td>.90*</td>
<td>.92*</td>
<td>.13</td>
<td>1.14*</td>
</tr>
<tr>
<td>Multiple Offenders</td>
<td>-1.51*</td>
<td>-1.21*</td>
<td>.03</td>
<td>.34*</td>
</tr>
<tr>
<td>Strangers</td>
<td>-1.02*</td>
<td>-1.11*</td>
<td>.24*</td>
<td>.09</td>
</tr>
<tr>
<td>Gun</td>
<td>3.71*</td>
<td>3.50*</td>
<td>.69*</td>
<td>—</td>
</tr>
<tr>
<td>Knife</td>
<td>1.48*</td>
<td>1.55*</td>
<td>.55*</td>
<td>—</td>
</tr>
<tr>
<td>Blunt Object</td>
<td>-.00</td>
<td>.36</td>
<td>.54*</td>
<td>—</td>
</tr>
<tr>
<td>Other Weapons</td>
<td>-2.31</td>
<td>-2.11</td>
<td>.49*</td>
<td>—</td>
</tr>
<tr>
<td>Male Offenders</td>
<td>-.16</td>
<td>-.19</td>
<td>.05</td>
<td>.47*</td>
</tr>
<tr>
<td>Black Offenders</td>
<td>.41</td>
<td>.19</td>
<td>.33*</td>
<td>-.08</td>
</tr>
<tr>
<td>Model $\chi^2$</td>
<td>491.40*</td>
<td>424.25*</td>
<td>136.69*</td>
<td>351.02*</td>
</tr>
<tr>
<td>$N$</td>
<td>12,471</td>
<td>6,270</td>
<td>3,666</td>
<td>12,471</td>
</tr>
</tbody>
</table>

* $p \leq .01$.

to kill black victims than nonblack victims ($b = .90$). Single offenders are 4.5 times more likely to kill the victim than multiple offenders ($b = -1.51$).

The hypothesis that victims are more likely to be killed by offenders whom they can identify is also supported. Offenders who are nonstrangers to the victim are 2.8 times more likely to kill the victim than offenders who are strangers ($b = -1.02$). An alternative interpretation of this effect is that lethal outcomes are more likely between nonstrangers because their grievances are more intense. This argument implies that the stronger the relational tie between the offender and victim, the greater the likelihood a lethal outcome.

To examine this possible interpretation, we coded the relationship between offenders and victims in more detail. Dummy variables were created based on whether the offender was a family member, a friend, or an acquaintance. Strangers were treated as the omitted category. The results indicate that the risk of a lethal outcome is greatest for family members, which is consistent with the intensity of grievance hypothesis. However, the risk is lower for friends than for acquaintances, which runs counter to
the notion that risk varies directly with relational tie. These findings suggest that the distinction between strangers and nonstrangers, and not simply relational distance, is the key factor affecting a lethal outcome.

As expected, guns are strongly associated with lethal outcomes. Offenders who use a gun are over 40 times more likely to kill the victim than offenders who do not use a weapon \((b = 3.71)\). Offenders who use a knife are 4.4 times more likely to kill the victim than offenders who do not use a weapon \((b = 1.48)\). The use of a blunt object or other weapons is not significantly related to lethal outcomes.

We advance no prediction in regard to the effects of the offenders' gender, and no significant effect is observed. We also examined whether there is a statistical interaction between the gender of the offender and victim by creating a product term and introducing it into the logistic regression equation. The product term does not have a significant effect on lethal outcome (results not shown). This finding runs counter to arguments suggesting that females have a special fear of males or that any outgroup prejudice plays a role in the degree of harm produced in intergender incidents.

We also derive no prediction about the effect of the offenders' race, and once again no significant effect is observed. To explore the possibility of statistical interactions between the race of the offender and victim, we created a race of victim, race of offender product term and included it in the analysis. This variable fails to exhibit a significant effect on lethal outcome (results not shown).

In the second column of Table 2 we present results from an equation predicting whether the victim is killed or seriously injured, omitting incidents involving minor injury. Approximately one half (49.6\%) of the incidents involving injury were serious. The results are very similar to those observed in the first column. They show that the factors predicting a lethal outcome, given any injury, are similar to those predicting a lethal outcome, given a serious injury. These findings give us more confidence that our results are not seriously distorted by sampling biases in the NCVS due to selective reporting by respondents. It seems unlikely that respondents would fail to report to interviewers incidents resulting in serious injury.

Determinants of whether the victim suffered a serious or minor injury, omitting incidents with lethal outcomes, are presented in the third column of Table 2. Weighting is not used for this equation because there is no need to adjust for the disproportionate sampling of lethal and nonlethal incidents. The effects are weak, in contrast to the effects reported in the first two columns. The use of weapons does have an effect: Injuries are likely to be more severe when offenders use any type of weapon. Severe injury is also significantly more likely to occur when the offender is a stranger, when the offender is black, and when the incident involves pure
assault rather than robbery. However, these coefficients are small. In a further analysis (not presented) we examined determinants of whether the injured victim was hospitalized or not. The results were similar to the results obtained when medical care is used as the criterion for determining a serious injury. The general conclusion is that, with the exception of weapons, the variables that predict lethal outcomes do not predict seriousness of injury in a similar manner. These findings support the idea that lethal outcomes are qualitatively different from nonlethal outcomes instead of the endpoint in a continuum representing the severity of injury.

In the case of weapons, the use of guns and knives is associated with more serious outcomes in all equations, but their use is a better predictor of death than serious injury. Blunt objects significantly increase the likelihood of severe (nonlethal) injury but do not affect lethal outcomes. The ambiguous variable representing “other weapons” has opposite effects on deaths versus serious nonlethal injuries, although the effect for lethal outcome is not significant.

The characteristics of offenders described above may also affect lethal outcomes indirectly, through their effects on gun use. Determinants of gun use are presented in the last column of Table 2. There are a number of statistically significant effects, although most of them are weak. The results show that guns are more likely to be used in rape and robbery than in pure assault. Guns are also more likely to be used when confronting male victims or black victims. These results suggest that a victim’s gender and race have indirect as well as direct effects on whether the victim is killed, through weapon choice. Offenders are more likely to use guns when confronting males and blacks, and this choice is strongly associated with more lethal outcomes.

The analyses described above are based on a restricted sample due to missing data on offender characteristics in the homicide data. In Table 3, we compare the effects of weapons and victim characteristics, which have little missing data, in the restricted sample and the maximum sample possible. All of the variables in this model have similar effects on lethal outcomes in both samples. These analyses give us greater confidence that biased sampling is not seriously distorting our results.

Our final analyses involve an examination of statistical interactions between type of crime and type of weapon. Unfortunately, our weighting procedure makes it very difficult to attain statistical significance for these interaction terms given the small numbers of incidents. After weighting, there are only 13 robberies and 1 rape with a lethal outcome. Our strategy is therefore to present results separately for robbery and pure assault (omitting an analysis of rape) without examining the statistical significance of the differences we observe. These results accordingly must be viewed as more tentative.
Table 3. Logistic Regressions for Predictors with Minimal Missing Data Across Samples

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Maximum Sample</th>
<th>Sample with Information on Offender Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male Victims</td>
<td>.96*</td>
<td>.85*</td>
</tr>
<tr>
<td>Black Victims</td>
<td>.95*</td>
<td>.94*</td>
</tr>
<tr>
<td>Gun</td>
<td>3.17*</td>
<td>3.15*</td>
</tr>
<tr>
<td>Knife</td>
<td>1.18*</td>
<td>1.23*</td>
</tr>
<tr>
<td>Blunt Object</td>
<td>-.23</td>
<td>-.27</td>
</tr>
<tr>
<td>Other Weapons</td>
<td>-2.38</td>
<td>-2.48</td>
</tr>
<tr>
<td>Model $\chi^2$</td>
<td>444.75*</td>
<td>374.11*</td>
</tr>
<tr>
<td>$N$</td>
<td>14,508</td>
<td>12,471</td>
</tr>
</tbody>
</table>

* $p \leq .01$.

As noted above, two competing hypotheses about the effects of lethal weapons in pure assault and robbery seem plausible. According to the compensation hypothesis, the effect of lethal weapons should be weaker in pure assaults than in robberies, because pure assaults are more likely to involve lethal intent. If offenders are determined to kill the victim, they will do so regardless of the type of weapon they use. On the other hand, the weapon facilitator hypothesis predicts stronger effects of lethal weapons in pure assault. Offenders who desire to kill the victim will find it easier to do so with a more lethal weapon.

The results, presented in Table 4, are more consistent with the weapon facilitator effect. The use of guns and knives—the two more lethal weapons—is more strongly related to lethal outcomes in pure assaults than in robberies. The use of a blunt object appears to be more strongly associated with lethal outcomes in robberies, but the effect is statistically insignificant for both types of crime.

Fear of retaliation also appears to play a more important role in pure assault than in robbery. The effects of gender of victim, race of victim, and multiple offenders are strong and statistically significant in pure assault. In robbery, the effects are weaker and statistically insignificant. The effects of victim's race reverses in sign. The relationship between the offender and victim also has a stronger effect on outcomes in pure assault than in robbery. Victims who know the offender are much more likely to be killed in pure assaults.

Perhaps the interactions we observe in Table 4 reflect the effects of relationship and not type of crime. Assaults are much more likely to involve nonstrangers than robberies. To examine this possibility, we estimated
Table 4. Logistic Regressions Separately for Robbery and "Pure" Assaults

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Robberies</th>
<th>&quot;Pure&quot; Assaults</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male Victims</td>
<td>.99</td>
<td>1.68*</td>
</tr>
<tr>
<td>Black Victims</td>
<td>-.14</td>
<td>1.21*</td>
</tr>
<tr>
<td>Multiple Offenders</td>
<td>-.83</td>
<td>-1.75*</td>
</tr>
<tr>
<td>Strangers</td>
<td>-.51</td>
<td>-1.24*</td>
</tr>
<tr>
<td>Gun</td>
<td>2.71*</td>
<td>3.92*</td>
</tr>
<tr>
<td>Knife</td>
<td>.60</td>
<td>1.63*</td>
</tr>
<tr>
<td>Blunt Object</td>
<td>1.05</td>
<td>-.24</td>
</tr>
<tr>
<td>Other Weapons</td>
<td>-2.31</td>
<td>-2.30</td>
</tr>
<tr>
<td>Male Offenders</td>
<td>.28</td>
<td>-.12</td>
</tr>
<tr>
<td>Black Offenders</td>
<td>.36</td>
<td>.29</td>
</tr>
<tr>
<td>Model $\chi^2$</td>
<td>27.41*</td>
<td>467.59*</td>
</tr>
<tr>
<td>$N$</td>
<td>2,482</td>
<td>9,440</td>
</tr>
</tbody>
</table>

* $p \leq .01$.

separate equations for assaults involving strangers and assaults involving nonstrangers. The results were quite similar, indicating that the effects we observe for assaults in Table 4 are not affected by the relationship between the offender and victim. We could not obtain meaningful results estimating separate equations for robberies involving strangers and nonstrangers because there were very few homicides available for analysis in the weighted subsamples (14 and 6, respectively). It is therefore possible that the effects of predictor variables might differ across relationship categories for robbery incidents but not for assaults, although we can think of no theoretical reason to expect such a three-way interaction.

SUMMARY AND DISCUSSION

Some homicide offenders kill their victim when they only want to injure them or when they have no clear intent to bring about death. Others have a specific desire to kill the victim. Their lethal intent may be premeditated, or it may develop during the crime, sometimes in response to the victim's behavior. Lethal intent is an extremely difficult concept to measure. However, the pattern of results reported above allows us to make reasonable inferences about the characteristics of violent encounters that are likely to be associated with lethal intent.

Lethal intent is more likely to be involved in pure assault than in robbery or rape, as indicated by the fact that lethal outcomes are more likely
for this type of crime. For robbery and rape offenders, the victim’s compliance is evidently more important, and harm to the victim is often incidental. Whether rapists value compliance in order to demonstrate power or to attain sexual gratification cannot be determined from these data (see Tedeschi and Felson, 1994).

The evidence supports the notion that tactical considerations are important in lethal intent. One plausible reason why offenders may desire to kill the victim is to avoid retaliation, either during the crime or at some later time. At least three findings are consistent with this explanation: (1) offenders are more likely to kill male victims than female victims; (2) offenders are more likely to kill black victims than nonblack victims; and (3) single offenders are more likely than multiple offenders to kill the victim. We recognize that fear of retaliation is not the only possible explanation for the effects of victims’ gender and race and multiple offenders on lethal outcomes. However, fear of retaliation does provide a plausible and parsimonious account for the full set of findings.

Further, the range of plausible alternative explanations is significantly reduced when the findings for the determinants of the severity of nonlethal outcomes are also considered. For example, one alternative to the fear of retaliation explanation is that offenders are less likely to attack victims who have a power advantage in the first place unless their anger is particularly intense. Those offenders who do attack such victims, then, could be more likely to kill simply because of their extreme anger, without regard for the risks of retaliation. The evidence that the number of offenders and the gender and race of the victim do not affect the seriousness of the nonlethal injury casts doubt on this argument. If offenders with a power disadvantage have high levels of anger to begin with, they should have injured victims more severely.

The findings regarding determinants of severity of nonlethal outcomes are also relevant to the issue of victim precipitation. It is possible that victims who are male or black and victims facing single offenders in fact engage in more violence. Offenders may kill them in response. We cannot determine from the data to what extent the victim’s behavior plays a mediating role in these effects. However, if violence by the victim results in more severe attacks by the offender, we should have found effects of the victim’s gender or race, and of multiple offenders, on the severity of nonlethal injury, which we did not. Note that whether or not the victim actually engages in violence, the offender’s decision to kill the victim to avoid personal harm is still a tactical one.

The finding of distinct patterns for lethal and nonlethal outcomes is also relevant to an alternative tactical interpretation of the race-of-victim effect. It may be that offenders are inhibited from killing white victims because they anticipate more certain and severe legal punishment.
Offenders may believe that agents of the criminal justice system devalue black victims and take such crimes less seriously. If offenders consider this factor during the crime, one would expect them to be reluctant to seriously injure white victims, but as noted, we find no significant effect of race of victim on the severity of a nonlethal injury.

There is an alternative explanation that could explain why the victim's race affects lethal outcomes but not severity of injury. Black victims may be more likely than whites to die from their wounds because they receive less timely or lower quality medical care (cf. Doerner and Speir, 1986). Blacks certainly have more restricted access to high-quality medical care in general. On the other hand, blacks are more likely to be victimized in inner-city neighborhoods, and the hospitals in these neighborhoods may actually provide better treatment to trauma patients because their staffs have more experience with these medical problems than staffs in hospitals with a more suburban or rural clientele.

Fear of retaliation is not the only tactical concern of offenders. Offenders may intentionally kill the victim in order to avoid prosecution. A lethal outcome may eliminate the only witness to the crime. Consistent with this reasoning, we find that offenders are more likely to kill the victim when he or she is someone who could identify them than when the victim is a stranger.

Alternative interpretations are also possible for the observed “stranger” effect. Perhaps offenders simply have more serious grievances with people they know, which is why they are more likely to kill. Two pieces of evidence argue against this interpretation, however. First, the likelihood of a lethal outcome is not linearly associated with the relational distance between offender and victim. Second, serious injury is more likely than mild injury when the offender is a stranger; if offenders have more serious grievances with people they know, they should injure them more, not less, severely.

Stranger effects could also be due to biased sampling. If homicides involving strangers are undersampled, because strangers are less likely to be known to the police, an artifactual negative relationship between lethal outcomes and the involvement of strangers could be produced. Under-sampling of incidents involving people who know each other in the NCVS could also produce this relationship. However, this undersampling is less likely given that we only include incidents in which there are injuries, and given that we observe the same relationship when we omit incidents involving mild injuries. In addition, the artifactual explanation cannot explain why stranger effects are stronger for assault than robbery. In fact, it might predict stronger effects for robbery than assault. Robbery homicides are more likely to be undersampled than homicides involving pure
assault because they are less likely to be solved.7

Consistent with previous research, we find that lethal outcomes are much more likely when offenders use guns. The use of knives is also associated with lethal outcomes, although the effect is much weaker. These weapons are more strongly associated with lethal outcomes in pure assaults than in robbery. This pattern suggests that the weapons facilitate a lethal outcome for offenders with lethal intent, given the assumption that assault offenders are more likely than robbery offenders to have lethal intent. These findings run counter to the notion that offenders who are determined to kill their victims compensate with greater effort if they do not have a lethal weapon.

Type of crime ( robbery vs. assault) appears to condition the effects of sociodemographic characteristics and number of offenders. The effects of the victim’s race and gender and the involvement of multiple offenders appear to be stronger in pure assault than in robbery. These results imply that coercive power and the fear of retaliation play a greater role in pure assault. This pattern seems counterintuitive if one assumes that assaults are more likely to involve strong emotions than robberies and that emotions override tactical concerns.

We can advance two possible explanations for the interactions among sociodemographic characteristics, number of offenders, and type of crime. First, tactical concerns may not be enough to motivate offenders to kill victims in robbery in the absence of a strong grievance. Assault offenders, who are angry and aggrieved, may already be motivated to severely harm the victim. The situation may be similar to laboratory experiments in which experimenters cannot get subjects to deliver shocks in response to their manipulations without provoking them as well (Tedeschi and Felson, 1994).

Second, robbery offenders are likely to choose victims who are vulnerable and have low coercive power (e.g., Letkemann, 1973). When they target men, blacks, or when they commit offenses alone, they are likely to target those who do not pose a threat in the first place. To the extent that they make these choices, gender, race, and number of offenders would not be predictive of retaliatory threat in robbery. In other words, tactical decisions preceding the robbery probably reduce the need for tactical decisions during the robbery. In pure assaults, on the other hand, offenders often have less choice regarding the victims. The violent incident may

7. If assaults are more likely than robberies to be witnessed by third parties, then the incentive for killing the victim-witness would be less. This would also lead to undersampling of robbery homicides, since the victim-witness is deceased. Both of these processes would produce a stronger relationship for robbery than assault, which is the opposite of the pattern observed.
involve victims who have attacked or provoked them. Situational factors such as the gender and race of the victim and the presence of allies would then have a greater effect on the extent to which assault offenders feel threatened and perceive a need to use lethal force.

Similar arguments might be used to explain the interaction between type of crime and victim-offender relationship. The tactical consideration of identifiability, reflected in nonstranger relationships, may be insufficient to motivate robbery offenders to kill their prey in the absence of the kind of grievances typically associated with assaultive incidents. Moreover, if robbery offenders tend to choose victims for tactical reasons in the first place, they will likely select people that they believe will not go to the police, whether the victims can identify them or not. Perhaps these victims are afraid of the offender or are engaged in illegal activity themselves and are fearful of legal repercussions.

With respect to our control variables, the effect of the victim’s gender on lethal outcomes does not depend on the gender of the offender. Male victims are apparently perceived as a greater threat by both male and female offenders. In addition, there is no evidence in our data that intergender incidents are any different from intragender incidents in lethal outcomes.

Nor are the effects of the victim’s race on lethal outcomes dependent on the race of the offender. Black victims are apparently perceived as more threatening to both black and nonblack offenders. It could be argued that offenders of both races devalue black victims and therefore feel less inhibited about taking their lives. However, the fact that black victims are no more likely than white victims to be seriously injured indicates that this type of devaluation is probably not a factor. In general, there is no evidence that interracial incidents are any different from intraracial incidents or that intergroup attitudes play a role in lethal outcomes.

The victim’s gender and race also have indirect effects on whether the victim is killed, through weapon choice. Offenders are more likely to use guns when confronting males and blacks, and the use of guns is strongly associated with lethal outcomes. The effects of the victim’s gender and race on gun use probably also reflect tactical concerns. Fear of retaliation from males and blacks apparently leads their adversaries to use lethal weapons and to formulate lethal intent.

In conclusion, lethal outcomes are sometimes intended and sometimes unintended. We have interpreted violent actions with lethal intent as instrumental or goal-oriented behavior. The decision to kill a victim reflects tactical concerns, as well as the desire to eliminate rivals, gain retribution, and attain favorable social identities. Of course, we cannot rule out the possibility that lethal intent is also affected by frustration or some other innate, nonrational process. Thus, some aggression theorists would
argue that lethal intent also reflects angry aggression and that we have only focused on part of the problem (e.g., Berkowitz, 1989). Whether all violence is instrumental cannot be answered by this research. Nevertheless, our analyses indicate the utility of applying this perspective in the study of injurious attacks and of taking seriously the notion of lethal intent.

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Frankel, Martin

Hanushek, Eric A. and John E. Jackson


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Tedeschi, James T. and Richard B. Felson
TO KILL OR NOT TO KILL?

Tittle, Charles R. and Charles H. Logan

Turner, Anthony G.

Wright, James D., Peter H. Rossi, and Kathleen Daly

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