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ARMED RESISTANCE TO CRIME: THE PREVALENCE AND NATURE OF SELF- DEFENSE WITH A GUN*

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I. INTRODUCTION

Crime victims used to be ignored by criminologists. Then, beginning slowly in the 1940s and more rapidly in the 1970s, interest in the victim's role in crime grew. Yet a tendency to treat the victim as either a passive target of another person's wrongdoing or as a virtual accomplice of the criminal limited this interest. The concept of the victim-precipitated homicide¹ highlighted the possibility that victims were not always blameless and passive targets, but that they sometimes initiated or contributed to the escalation of a violent interaction through their own actions, which they often claimed were defensive.

Perhaps due to an unduly narrow focus on lower-class male-on-male violence, scholars have shown little openness to the possibility that a good deal of "defensive" violence by persons claiming the moral status of a victim may be just that. Thus, many scholars routinely assumed that a large share of violent interactions are "mutual combat" involving two blameworthy parties who each may be regarded as both offender and victim. The notion that much violence is one-sided and that many victims of violence are largely blameless is dismissed as naive.

A few criminologists have rejected the simplistic mutual combat model of violence, though they sometimes limit its rejection to a few special subtypes of violence, especially family violence, rape, and, more generally, violence of men against women and of adults against

* The authors wish to thank David Bordua, Gary Mauser, Seymour Sudman, and James Wright for their help in designing the survey instrument. The authors also wish to thank the highly skilled staff responsible for the interviewing: Michael Trapp (Supervisor), David Antonacci, James Belcher, Robert Bunting, Melissa Cross, Sandy Hawker, Dana R. Jones, Harvey Langford, Jr., Susannah R. Maher, Nia Mastin-Walker, Brian Murray, Miranda Ross, Dale Sellers, Esty Zervigon, and for sampling work, Sandy Grguric.

¹ MARVIN E. WOLFGANG, *PATTERNS IN CRIMINAL HOMICIDE* 245 (1958).

children.² However, the more one looks, the more exceptions become evident, such as felony killings linked with robberies, burglaries, or sexual assaults, contract killings, mass killings, serial murders, and homicides where the violence is one-sided. Indeed, it may be more accurate to see the mutual combat common among lower-class males to be the exception rather than the rule. If this is so, then forceful actions taken by victims are easier to see as genuinely and largely defensive.

Once one turns to defensive actions taken by the victims of property crimes, it is even easier to take this view. There are few robberies, burglaries, larcenies, or auto thefts where it is hard to distinguish offender from victim or to identify one of the parties as the clear initiator of a criminal action and another party as a relatively legitimate responder to those initiatives. The traditional conceptualization of victims as either passive targets or active collaborators overlooks another possible victim role, that of the active resister who does not initiate or accelerate any illegitimate activity, but uses various means of resistance for legitimate purposes, such as avoiding injury or property loss.

Victim resistance can be passive or verbal, but much of it is active and forceful. Potentially, the most consequential form of forceful resistance is armed resistance, especially resistance with a gun. This form of resistance is worthy of special attention for many reasons, both policy-related and scientific. The policy-related reasons are obvious: if self-protection with a gun is commonplace, it means that any form of gun control that disarms large numbers of prospective victims, either altogether, or only in certain times and places where victimization might occur, will carry significant social costs in terms of lost opportunities for self-protection.

On the other hand, the scientific reasons are likely to be familiar only to the relatively small community of scholars who study the consequences of victim self-protection: the defensive actions of crime victims have significant effects on the outcomes of crimes, and the effects of armed resistance differ from those of unarmed resistance. Previous research has consistently indicated that victims who resist with a gun or other weapon are less likely than other victims to lose their property in robberies³ and in burglaries.⁴ Consistently, research also has

² Richard A. Berk et al., *Mutual Combat and Other Family Violence Myths*, in *THE DARK SIDE OF FAMILIES 197* (David Finkelhor et al. eds., 1983).

³ See generally MICHAEL J. HINDELANG, *CRIMINAL VICTIMIZATION IN EIGHT AMERICAN CITIES* (1976); Gary Kleck, *Crime Control Through the Private Use of Armed Force*, 35 *SOC. PROBS.* 1 (1988); Gary Kleck & Miriam A. DeLone, *Victim Resistance and Offender Weapon Effects in Robbery*, 9 *J. QUANTITATIVE CRIMINOLOGY* 55 (1993); Eduard A. Ziegenhagen & Dolores

indicated that victims who resist by using guns or other weapons are less likely to be injured compared to victims who do not resist or to those who resist without weapons. This is true whether the research relied on victim surveys or on police records, and whether the data analysis consisted of simple cross-tabulations or more complex multivariate analyses. These findings have been obtained with respect to robberies⁵ and to assaults.⁶ Cook⁷ offers his unsupported personal opinion concerning robbery victims that resisting with a gun is only prudent if the robber does not have a gun. The primary data source on which Cook relies flatly contradicts this opinion. National Crime Victimization Survey (NCVS) data indicate that even in the very disadvantageous situation where the robber has a gun, victims who resist with guns are still substantially less likely to be injured than those who resist in other ways, and even slightly less likely to be hurt than those who do not resist at all.⁸

With regard to studies of rape, although samples typically include too few cases of self-defense with a gun for separate analysis, McDermott,⁹ Quinsey and Upfold,¹⁰ Lizotte,¹¹ and Kleck and Sayles¹² all found that victims who resisted with some kind of weapon were less likely to have the rape attempt completed against them. Findings concerning the impact of armed resistance on whether rape victims suffer additional injuries beyond the rape itself are less clear, due to a lack of information on whether acts of resistance preceded or followed the rapist's attack. The only two rape studies with the necessary sequence information found that forceful resistance by rape victims usually follows, rather than precedes, rapist attacks inflicting additional injury, undercutting the proposition that victim resistance increases the likelihood that the victim will be hurt.¹³ This is consistent with findings on robbery and assault.¹⁴

Brosnan, *Victim Responses to Robbery and Crime Control Policy*, 23 *CRIMINOLOGY* 675 (1985).

⁴ See generally Philip J. Cook, *The Technology of Personal Violence*, 14 *CRIME & JUST.: ANN. REV. RES.* 1, 57 (1991).

⁵ Ziegenhagen & Brosnan, *supra* note 3; Kleck *supra* note 3; Kleck & DeLone, *supra* note 3.

⁶ Kleck, *supra* note 3.

⁷ Cook, *supra* note 4, at 58.

⁸ Kleck & DeLone, *supra* note 3, at 75.

⁹ JOAN M. MCDERMOTT, *RAPE VICTIMIZATION IN 26 AMERICAN CITIES* (1979).

¹⁰ Quinsey & Upfold, *Rape Completion and Victim Injury as a Function of Female Resistance Strategy*, 17 *CAN. J. BEHAV. SCI.* 40 (1985).

¹¹ Alan J. Lizotte, *Determinants of Completing Rape and Assault*, 2 *J. QUANTITATIVE CRIMINOLOGY* 203 (1986).

¹² Gary Kleck & Susan Sayles, *Rape and Resistance*, 37 *SOC. PROBS.* 149 (1990).

¹³ Quinsey & Upfold, *supra* note 10, at 46-47. See generally Sarah E. Ullman & Raymond A. Knight, *Fighting Back: Women's Resistance to Rape*, 7 *J. INTERPERSONAL VIOLENCE* 31 (1992).

¹⁴ See Kleck, *supra* note 3, at 9.

II. THE PREVALENCE OF DEFENSIVE GUN USE (DGU) IN PREVIOUS SURVEYS

A. THE NATIONAL CRIME VICTIMIZATION SURVEY (NCVS)

However consistent the evidence may be concerning the effectiveness of armed victim resistance, there are some who minimize its significance by insisting that it is rare.¹⁵ This assertion is invariably based entirely on a single source of information, the National Crime Victimization Survey (NCVS).

Data from the NCVS imply that each year there are only about 68,000 defensive uses of guns in connection with assaults and robberies,¹⁶ or about 80,000 to 82,000 if one adds in uses linked with household burglaries.¹⁷ These figures are less than one ninth of the estimates implied by the results of at least thirteen other surveys, summarized in Table 1, most of which have been previously reported.¹⁸ The NCVS estimates imply that about 0.09 of 1% of U.S. households experience a defensive gun use (DGU) in any one year, compared to the Mauser survey's estimate of 3.79% of households over a five year period, or about 0.76% in any one year, assuming an even distribution over the five year period, and no repeat uses.¹⁹

The strongest evidence that a measurement is inaccurate is that it is inconsistent with many other independent measurements or observations of the same phenomenon; indeed, some would argue that this is ultimately the *only* way of knowing that a measurement is wrong. Therefore, one might suppose that the gross inconsistency of the NCVS-based estimates with all other known estimates, each derived from sources with no known flaws even remotely substantial enough to account for nine-to-one, or more, discrepancies, would be sufficient to persuade any serious scholar that the NCVS estimates are unreliable.

Apparently it is not, since the Bureau of Justice Statistics continues to disseminate their DGU estimates as if they were valid,²⁰ and scholars continue to cite the NCVS estimates as being at least as rea-

¹⁵ Cook, *supra* note 4; David McDowall & Brian Wiersema, *The Incidence of Defensive Firearm Use by U.S. Crime Victims, 1987 Through 1990*, 84 AM. J. PUB. HEALTH 1982 (1994); UNDERSTANDING AND PREVENTING VIOLENCE 265 (Albert J. Reiss & Jeffrey A. Roth eds., 1993).

¹⁶ Kleck, *supra* note 3, at 8.

¹⁷ Cook, *supra* note 4, at 56; MICHAEL R. RAND, BUREAU OF JUSTICE STATISTICS, GUNS AND CRIME (Crime Data Brief) (1994).

¹⁸ See Kleck, *supra* note 3, at 3; GARY KLECK, POINT BLANK: GUNS AND VIOLENCE IN AMERICA 146 (1991).

¹⁹ Gary A. Mauser, Firearms and Self-Defense: The Canadian Case, Presented at the Annual Meetings of the American Society of Criminology (Oct. 28, 1993).

²⁰ RAND, *supra* note 17.

sonable as those from the gun surveys.²¹ Similarly, the editors of a report on violence conducted for the prestigious National Academy of Sciences have uncritically accepted the validity of the NCVS estimate as being at least equal to that of all of the alternative estimates.²² In effect, even the National Academy of Sciences gives no more weight to estimates from numerous independent sources than to an estimate derived from a single source which is, as explained below, singularly ill-suited to the task of estimating DGU frequency.

This sort of bland and spurious even-handedness is misleading. For example, Reiss and Roth withheld from their readers that there were at least *nine* other estimates contradicting the NCVS-based estimate; instead they vaguely alluded only to "a number of surveys,"²³ as did Cook,²⁴ and they downplayed the estimates from the other surveys on the basis of flaws which they only speculated those surveys *might* have. Even as speculations, these scholars' conjectures were conspicuously one-sided, focusing solely on possible flaws whose correction would bring the estimate down, while ignoring obvious flaws, such as respondents (Rs) forgetting or intentionally concealing DGUs, whose correction would push the estimate up. Further, the speculations, even if true, would be wholly inadequate to account for more than a small share of the enormous nine-to-one or more discrepancy between the NCVS-based estimates and all other estimates. For example, the effects of telescoping can be completely cancelled out by the effects of memory loss and other recall failure, and even if they are not, they cannot account for more than a tiny share of a discrepancy of nine-to-one or more.

Equally important, those who take the NCVS-based estimates seriously have consistently ignored the most pronounced limitations of the NCVS for estimating DGU frequency. The NCVS is a non-anonymous national survey conducted by a branch of the federal government, the U.S. Bureau of the Census. Interviewers identify themselves to Rs as federal government employees, even displaying, in face-to-face contacts, an identification card with a badge. Rs are told that the interviews are being conducted on behalf of the U.S. Department of Justice, the law enforcement branch of the federal government. As a preliminary to asking questions about crime victimization experiences, interviewers establish the address, telephone number, and full names of all occupants, age twelve and over, in each house-

²¹ Cook, *supra* note 4, at 56; McDowall & Wiersema, *supra* note 15.

²² UNDERSTANDING AND PREVENTING VIOLENCE, *supra* note 15, at 265-66.

²³ *Id.* at 265.

²⁴ Cook, *supra* note 4, at 54.

hold they contact.²⁵ In short, it is made very clear to Rs that they are, in effect, speaking to a law enforcement arm of the federal government, whose employees know exactly who the Rs and their family members are, where they live, and how they can be recontacted.

Even under the best of circumstances, reporting the use of a gun for self-protection would be an extremely sensitive and legally controversial matter for either of two reasons. As with other forms of forceful resistance, the defensive act itself, regardless of the characteristics of any weapon used, might constitute an unlawful assault or at least the R might believe that others, including either legal authorities or the researchers, could regard it that way. Resistance with a gun also involves additional elements of sensitivity. Because guns are legally regulated, a victim's possession of the weapon, either in general or at the time of the DGU, might itself be unlawful, either in fact or in the mind of a crime victim who used one. More likely, lay persons with a limited knowledge of the extremely complicated law of either self-defense or firearms regulation are unlikely to know for sure whether their defensive actions or their gun possession was lawful.

It is not hard for gun-using victims interviewed in the NCVS to withhold information about their use of a gun, especially since they are *never directly asked whether they used a gun for self-protection*. They are asked only general questions about whether they did anything to protect themselves.²⁶ In short, Rs are merely given the opportunity to volunteer the information that they have used a gun defensively. All it takes for an R to conceal a DGU is to simply refrain from mentioning it, i.e., to leave it out of what may be an otherwise accurate and complete account of the crime incident.

Further, Rs in the NCVS are not even asked the general self-protection question unless they already independently indicated that they had been a victim of a crime. This means that any DGUs associated with crimes the Rs did not want to talk about would remain hidden. It has been estimated that the NCVS may catch less than one-twelfth of spousal assaults and one-thirty-third of rapes,²⁷ thereby missing nearly all DGUs associated with such crimes.

In the context of a nonanonymous survey conducted by the fed-

²⁵ U.S. BUREAU OF THE CENSUS, NATIONAL CRIME SURVEY: INTERVIEWER'S MANUAL, NCS-550, PART D - HOW TO ENUMERATE NCS (1986).

²⁶ U.S. BUREAU OF JUSTICE STATISTICS, CRIMINAL VICTIMIZATION IN THE UNITED STATES 1992, at 128 (1994).

²⁷ Colin Loftin & Ellen J. MacKenzie, Building National Estimates of Violent Victimization 21-23 (April 1-4, 1990) (unpublished background paper prepared for the Symposium on the Understanding and Control of Violent Behavior, sponsored by the National Research Council).

eral government, an R who reports a DGU may believe that he is placing himself in serious legal jeopardy. For example, consider the issue of the location of crimes. For all but a handful of gun owners with a permit to carry a weapon in public places (under 4% of the adult population even in states like Florida, where carry permits are relatively easy to get)²⁸, the mere possession of a gun in a place other than their home, place of business, or in some states, their vehicle, is a crime, often a felony. In at least ten states, it is punishable by a punitively mandatory minimum prison sentence.²⁹ Yet, 88% of the violent crimes which Rs reported to NCVS interviewers in 1992 were committed away from the victim's home,³⁰ i.e., in a location where it would ordinarily be a crime for the victim to even possess a gun, never mind use it defensively. Because the question about location is asked before the self-protection questions,³¹ the typical violent crime victim R has already committed himself to having been victimized in a public place before being asked what he or she did for self-protection. In short, Rs usually could not mention their defensive use of a gun without, in effect, confessing to a crime to a federal government employee.

Even for crimes that occurred in the victim's home, such as a burglary, possession of a gun would still often be unlawful or of unknown legal status; because the R had not complied with or could not be sure he had complied with all legal requirements concerning registration of the gun's acquisition or possession, permits for purchase, licensing of home possession, storage requirements, and so on. In light of all these considerations, it may be unrealistic to assume that more than a fraction of Rs who have used a gun defensively would be willing to report it to NCVS interviewers.

The NCVS was not designed to estimate how often people resist crime using a gun. It was designed primarily to estimate national victimization levels; it incidentally happens to include a few self-protection questions which include response categories covering resistance with a gun. Its survey instrument has been carefully refined and evaluated over the years to do as good a job as possible in getting people to report illegal things which *other* people have done *to* them. This is the exact opposite of the task which faces anyone trying to get good DGU estimates—to get people to admit controversial and possibly illegal

²⁸ Patrick Blackman, *Carrying Handguns for Personal Protection* 31 (1985) (unpublished paper presented at the annual meetings of the American Society of Criminology) (Nov. 13-16, 1985); KLECK, *supra* note 18, at 412.

²⁹ Kent M. Ronhovde & Gloria P. Sugars, *Survey of Select State Firearm Control Laws*, in *FEDERAL REGULATION OF FIREARMS* 204-05 (H. Hogan ed., 1982) (report prepared for the U.S. Senate Judiciary Committee by the Congressional Research Service).

³⁰ U.S. BUREAU OF JUSTICE STATISTICS, *supra* note 26, at 75.

³¹ *Id.* at 124, 128.

things which the *Rs themselves have done*. Therefore, it is neither surprising, nor a reflection on the survey's designers, to note that the NCVS is singularly ill-suited for estimating the prevalence or incidence of DGU. It is not credible to regard this survey as an acceptable basis for establishing, in even the roughest way, how often Americans use guns for self-protection.

B. THE GUN SURVEYS

At least thirteen previous surveys have given a radically different picture of the frequency of DGUs. The surveys, summarized in Table 1, can be labelled the "gun surveys" because they were all, at least to some extent, concerned with the ownership and use of guns. Some were primarily devoted to this subject, while others were general purpose opinion surveys which happened to include some questions pertaining to guns. They are an extremely heterogeneous collection, some conducted by academic researchers for scholarly purposes, others by commercial polling firms. Moreover, their sponsors differed; some were sponsored by pro-gun control organizations (Cambridge Reports, Hart), others were sponsored by anti-control organizations (DMIIa, DMIIb), while still others were paid for by news media organizations, governments, or by research grants awarded to independent academics.

None of the surveys were meant as exclusive studies of DGU. Indeed, they each contained only one or two questions on the subject. Consequently, none of them are very thorough or satisfactory for estimating DGU frequency, even though they otherwise seem to have been conducted quite professionally. Some of the surveys were flawed by asking questions that used a lifetime recall period ("Have you ever . . .?"), making it impossible to estimate uses within any specified time span.³² Some surveys limited coverage to registered voters, while others failed to exclude defensive uses against animals, or occupational uses by police officers, military personnel, or private security guards.³³ Some asked the key questions with reference only to the R, while others asked Rs to report on the experiences of all of the members of their households, relying on second-hand reports.³⁴ Methodological research on the NCVS indicates that substantially fewer crime incidents are reported when one household member reports for all household members than when each person is interviewed separately about their own experiences.³⁵ The same should also be true of those

³² See Table 1, row labelled "Time Span of Use."

³³ *Id.* at row labelled "Excluded military, police uses."

³⁴ *Id.* at row labelled "Defensive question refers to."

³⁵ U.S. BUREAU OF JUSTICE STATISTICS, *supra* note 26, at 144.

crime incidents that involve victims using guns.

The least useful of the surveys did not even ask the defensive use question of all Rs, instead it asked it only of gun owners, or, even more narrowly, of just handgun owners or just those who owned handguns for protection purposes.³⁶ This procedure was apparently based on the dubious assumption that people who used a gun defensively no longer owned the gun by the time of the survey, or that the gun belonged to someone else, or that the R owned the gun for a reason other than protection or kept it outside the home.

Most importantly, the surveys did not ask enough questions to establish exactly what was done with the guns in reported defensive use incidents. At best, some of the surveys only established whether the gun was fired. The lack of such detail raises the possibility that the guns were not actually "used" in any meaningful way. Instead, Rs might be remembering occasions on which they merely carried a gun for protection "just in case" or investigated a suspicious noise in their backyard, only to find nothing.

Nevertheless, among these imperfect surveys, two were relatively good for present purposes. Both the Hart survey in 1981 and the Mauser survey in 1990 were national surveys which asked carefully worded questions directed at all Rs in their samples. Both surveys excluded uses against animals and occupational uses. The two also nicely complemented each other in that the Hart survey asked only about uses of handguns, while the Mauser survey asked about uses of all gun types. The Hart survey results implied a minimum of about 640,000 annual DGUs involving handguns, while the Mauser results implied about 700,000 involving any type of gun.³⁷ It should be stressed, contrary to the claims of Reiss and Roth,³⁸ that neither of these estimates entailed the use of "dubious adjustment procedures." The percent of sample households reporting a DGU was simply multiplied by the total number of U.S. households, resulting in an estimate of DGU-involved households. This figure, compiled for a five year period, was then divided by five to yield a per-year figure.

In effect, each of the surveys summarized in Table 1 was measuring something different; simple estimates derived from each of them is not comparable in any straight-forward way. The figures in the bottom row reflect adjustments designed to produce estimates which are

³⁶ CAMBRIDGE REPORTS, INC., AN ANALYSIS OF PUBLIC ATTITUDES TOWARDS HANDGUN CONTROL (1978); THE OHIO STATISTICAL ANALYSIS CENTER, OHIO CITIZEN ATTITUDES CONCERNING CRIME AND CRIMINAL JUSTICE (1982); H. Quinley, Memorandum reporting results from Time/CNN Poll of Gun Owners, dated Feb. 6, 1990 (1990).

³⁷ KLECK, *supra* note 18, at 106-07.

³⁸ UNDERSTANDING AND PREVENTING VIOLENCE, *supra* note 15, at 266.

roughly comparable across surveys. The adjustments were based on a single standard, the Mauser survey. That is, all survey results were adjusted to approximate what they would have been had the surveys all been, like the Mauser survey, national surveys of noninstitutionalized U.S. adult residents in 1990, using the same question Mauser used. The question was addressed to all Rs; it concerned the experiences of all household members; it pertained to the use of any type of gun; and it excluded uses against animals. The full set of adjustments is explained in detail elsewhere.³⁹

Eleven of the surveys permitted the computation of a reasonable adjusted estimate of DGU frequency. Two surveys for which estimates could not be produced were the Cambridge Reports and the Time/CNN. Neither asked the DGU question of all Rs; thus, it would be sheer speculation what the responses would have been among those Rs not asked the DGU question. All of the eleven surveys yielded results that implied over 700,000 uses per year. None of the surveys implied estimates even remotely like the 65,000 to 82,000 figures derived from the NCVS. To date, there has been no confirmation of even the most approximate sort of the NCVS estimates. Indeed, no survey has ever yielded an estimate which is of the same magnitude as those derived from the NCVS.

However, even the best of the gun surveys had serious problems. First, none of them established how many times Rs used a gun defensively within the recall period. It was necessary to conservatively assume that each DGU-involved person or household experienced only one DGU in the period, a figure which is likely to be an underestimation. Second, although the Mauser and Hart surveys were the best available surveys in other respects, they asked Rs to report for their entire households, rather than speaking only for themselves. Third, while these two surveys did use a specific recall period, it was five years, which encouraged a greater amount of both memory loss and telescoping. The longer the recall period, the more memory loss predominates over telescoping as a source of response error,⁴⁰ supporting the conclusion that a five year recall period probably produces a net underreporting of DGUs. Fourth, while the surveys all had acceptably large samples by the standards of ordinary national surveys, mostly in the 600 to 1500 range, they were still smaller than one would prefer for estimating a phenomenon which is fairly rare. While on average the sample size has no effect on the point estimate of DGU

³⁹ Gary Kleck, *Guns and Self-Defense* (1994) (unpublished manuscript on file with the School of Criminology and Criminal Justice, Florida State University, Tallahassee, FL).

⁴⁰ Seymour Sudman & Norman M. Bradburn, *Effects of Time and Memory Factors on Response in Surveys*, 68 J. AM. STAT. ASS'N 808 (1973).

frequency, it will affect the amount of sampling error. Finally, none of the surveys established exactly what Rs did with their guns in reported DGUs, making it impossible to be certain that they were actually used in any meaningful way. In sum, while the gun surveys are clearly far superior to the NCVS for estimating DGU frequency, they have significant shortcomings. These are discussed in greater detail elsewhere.⁴¹

It was the goal of the research reported here to remedy those flaws, to develop a credible estimate of DGU frequency, and to learn something about the nature of DGU incidents and the people who defend themselves with guns.

C. THE NATIONAL SELF-DEFENSE SURVEY

1. *Methods*

The present survey is the first survey ever devoted to the subject of armed self-defense. It was carefully designed to correct all of the known correctable or avoidable flaws of previous surveys which critics have identified. We use the most anonymous possible national survey format, the anonymous random digit dialed telephone survey. We did not know the identities of those who were interviewed, and made this fact clear to the Rs. We interviewed a large nationally representative sample covering all adults, age eighteen and over, in the lower forty-eight states and living in households with telephones.⁴² We asked DGU questions of all Rs in our sample, asking them separately about both their own DGU experiences and those of other members of their households. We used both a five year recall period and a one year recall period. We inquired about uses of both handguns and other types of guns, and excluded occupational uses of guns and uses against animals. Finally, we asked a long series of detailed questions designed to establish exactly what Rs did with their guns; for example, if they had confronted other humans, and how had each DGU connected to a specific crime or crimes.

We consulted with North America's most experienced experts on gun-related surveys, David Bordua, James Wright, and Gary Mauser, along with survey expert Seymour Sudman, in order to craft a state-of-the-art survey instrument designed specifically to establish the frequency and nature of DGUs.⁴³ A professional telephone polling firm,

⁴¹ Kleck, *supra* note 39.

⁴² Completed interviews, n=4,977.

⁴³ See, e.g., DAVID J. BORDUA ET AL., ILLINOIS LAW ENFORCEMENT COMMISSION, PATTERNS OF FIREARMS OWNERSHIP, REGULATION AND USE IN ILLINOIS (1979); SEYMOUR SUDMAN & NORMAN BRADBURN, RESPONSE EFFECTS IN SURVEYS (1974); JAMES WRIGHT & PETER ROSSI, ARMED AND CONSIDERED DANGEROUS (1986); Alan J. Lizotte & David J. Bordua, *Firearms Ownership for Sport and Protection*, 46 AM. SOC. REV. 499 (1980); Gary Mauser, *A Comparison of Canadian*

Research Network of Tallahassee, Florida, carried out the sampling and interviewing. Only the firm's most experienced interviewers, who are listed in the acknowledgements, were used on the project. Interviews were monitored at random by survey supervisors. All interviews in which an alleged DGU was reported by the R were validated by supervisors with call-backs, along with a 20% random sample of all other interviews. Of all eligible residential telephone numbers called where a person rather than an answering machine answered, 61% resulted in a completed interview. Interviewing was carried out from February through April of 1993.

The quality of sampling procedures was well above the level common in national surveys. Our sample was not only large and nationally representative, but it was also stratified by state. That is, forty-eight independent samples of residential telephone numbers were drawn, one from each of the lower forty-eight states, providing forty-eight independent, albeit often small, state samples. Given the nature of randomly generated samples of telephone numbers, there was no clustering of cases or multistage sampling as there is in the NCVS;⁴⁴ consequently, there was no inflation of sampling error due to such procedures. To gain a larger raw number of sample DGU cases, we oversampled in the south and west regions, where previous surveys have indicated gun ownership is higher.⁴⁵ We also oversampled within contacted households for males, who are more likely to own guns and to be victims of crimes in which victims might use guns defensively.⁴⁶ Data were later weighted to adjust for oversampling.

Each interview began with a few general "throat-clearing" questions about problems facing the R's community and crime. The interviewers then asked the following question: "Within the past *five years*, have you yourself or another member of your household *used* a gun, even if it was not fired, for self-protection or for the protection of property at home, work, or elsewhere? Please do *not* include military service, police work, or work as a security guard." Rs who answered "yes" were then asked: "Was this to protect against an animal or a person?" Rs who reported a DGU against a person were asked: "How many incidents involving defensive uses of guns against persons happened to members of your household in the past five years?" and "Did this incident [any of these incidents] happen in the *past twelve*

and *American Attitudes Towards Firearms*, 32 CAN. J. CRIMINOLOGY 573 (1990); Gary Mauser, 'Sorry, Wrong Number': Why Media Polls on Gun Control Are Often Unreliable, 9 POL. COMM. 69 (1992); Mauser, *supra* note 16.

⁴⁴ U.S. BUREAU OF JUSTICE STATISTICS, *supra* note 26, at 141-42.

⁴⁵ KLECK, *supra* note 18, at 57.

⁴⁶ *Id.* at 56.

months?" At this point, Rs were asked "Was it *you* who used a gun defensively, or did someone else in your household do this?"

All Rs reporting a DGU were asked a long, detailed series of questions establishing exactly what happened in the DGU incident. Rs who reported having experienced more than one DGU in the previous five years were asked about their most recent experience. When the original R was the one who had used a gun defensively, as was usually the case, interviewers obtained his or her firsthand account of the event. When the original R indicated that some other member of the household was the one who had the experience, interviewers made every effort to speak directly to the involved person, either speaking to that person immediately or obtaining times and dates to call back. Up to three call-backs were made to contact the DGU-involved person. We anticipated that it would sometimes prove impossible to make contact with these persons, so interviewers were instructed to always obtain a proxy account of the DGU from the original R, on the assumption that a proxy account would be better than none at all. It was rarely necessary to rely on these proxy accounts—only six sample cases of DGUs were reported through proxies, out of a total of 222 sample cases.

While all Rs reporting a DGU were given the full interview, only a one-third random sample of Rs not reporting a DGU were interviewed. The rest were simply thanked for their help. This procedure helped keep interviewing costs down. In the end, there were 222 completed interviews with Rs reporting DGUs, another 1,610 Rs not reporting a DGU but going through the full interview by answering questions other than those pertaining to details of the DGUs. There were a total of 1,832 cases with the full interview. An additional 3,145 Rs answered only enough questions to establish that no one in their household had experienced a DGU against a human in the previous five years (unweighted totals). These procedures effectively under-sampled for non-DGU Rs or, equivalently, oversampled for DGU-involved Rs. Data were also weighted to account for this oversampling.

Questions about the details of DGU incidents permitted us to establish whether a given DGU met all of the following qualifications for an incident to be treated as a genuine DGU: (1) the incident involved defensive action against a human rather than an animal, but not in connection with police, military, or security guard duties; (2) the incident involved actual contact with a person, rather than merely investigating suspicious circumstances, etc.; (3) the defender could state a specific crime which he thought was being committed at the time of the incident; (4) the gun was actually used in some way—at a minimum it had to be used as part of a threat against a person, either by

verbally referring to the gun (e.g., "get away—I've got a gun") or by pointing it at an adversary. We made no effort to assess either the lawfulness or morality of the Rs' defensive actions.

An additional step was taken to minimize the possibility of DGU frequency being overstated. The senior author went through interview sheets on every one of the interviews in which a DGU was reported, looking for any indication that the incident might not be genuine. A case would be coded as questionable if even just one of four problems appeared: (1) it was not clear whether the R actually confronted any adversary he saw; (2) the R was a police officer, member of the military or a security guard, and thus might have been reporting, despite instructions, an incident which occurred as part of his occupational duties; (3) the interviewer did not properly record exactly what the R had done with the gun, so it was possible that he had not used it in any meaningful way; or (4) the R did not state or the interviewer did not record a specific crime that the R thought was being committed against him at the time of the incident. There were a total of twenty-six cases where at least one of these problematic indications was present. It should be emphasized that we do not know that these cases were *not* genuine DGUs; we only mean to indicate that we do not have as high a degree of confidence on the matter as with the rest of the cases designated as DGUs. Estimates using all of the DGU cases are labelled herein as "*A*" estimates, while the more conservative estimates based only on cases devoid of any problematic indications are labelled "*B*" estimates.

2. Results

Table 2 displays a large number of estimates of how often guns are used defensively. These estimates are not inconsistent with each other; they each measure different things in different ways. Some estimates are based only on incidents which Rs reported as occurring in the twelve months preceding the interview, while others are based on incidents reported for the preceding five years. Both telescoping and recall failure should be lower with a one year recall period, so estimates derived from this period should be superior to those based on the longer recall period. Some estimates are based only on incidents which Rs reported as involving themselves, (person-based estimates), while others were based on all incidents which Rs reported as involving anyone in their household (household-based estimates). The person-based estimates should be better because of its first-hand character. Finally, some of the figures pertain only to DGUs involving use of handguns, while others pertain to DGUs involving any type of gun.

The methods used to compute the Table 2 estimates are very simple and straight-forward. Prevalence ("% Used") figures were computed by dividing the weighted sample frequencies in the top two rows of numbers by the total weighted sample size of 4,977. The estimated number of persons or households who experienced a DGU, listed in the third and fourth rows, was then computed by multiplying these prevalence figures by the appropriate U.S. population base, age eighteen and over for person-based estimates, and the total number of households for household-based estimates. Finally, the estimated number of defensive uses was computed by multiplying the number of DGU-involved persons or households by the following estimates of the number of all-guns DGU incidents per DGU-involved person or household, using a past-five-years recall period: person-based, A—1.478; person-based, B—1.472; household-based, A—1.531; household-based, B—1.535. We did not establish how many DGUs occurred in the past year, and for past-five-years DGUs, we did not separately establish how many of the DGUs involved handguns and how many involved other types of guns. Therefore, for all past-year estimates, and for past-five-years handgun estimates, it was necessary to conservatively assume that there was only one DGU per DGU-involved person or household.

The most technically sound estimates presented in Table 2 are those based on the shorter one-year recall period that rely on Rs' first-hand accounts of their own experiences (person-based estimates). These estimates appear in the first two columns. They indicate that each year in the U.S. there are about 2.2 to 2.5 million DGUs of all types by civilians against humans, with about 1.5 to 1.9 million of the incidents involving use of handguns.

These estimates are larger than those derived from the best previous surveys, indicating that technical improvements in the measurement procedures have, contrary to the expectations of Cook,⁴⁷ Reiss and Roth,⁴⁸ and McDowall and Wiersema,⁴⁹ *increased* rather than decreased estimates of the frequency that DGUs occur. Defensive gun use is thus just another specific example of a commonplace pattern in criminological survey work, which includes victimization surveys, self-report surveys of delinquency, surveys of illicit drug use, etc.: the better the measurement procedures, the higher the estimates of controversial behaviors.⁵⁰

The present estimates are higher than earlier ones primarily due

⁴⁷ Cook, *supra* note 4.

⁴⁸ UNDERSTANDING AND PREVENTING VIOLENCE, *supra* note 15.

⁴⁹ McDowall & Wiersema, *supra* note 15.

⁵⁰ See, e.g., MICHAEL HINDELANG ET AL., MEASURING DELINQUENCY (1981).

to three significant improvements in the present survey: (1) a shorter recall period; (2) reliance on person-based information rather than just household-based information; and (3) information on how many household DGUs had been experienced in the recall period by those Rs reporting any such experiences. Using a shorter recall period undoubtedly reduced the effects of memory loss by reducing the artificial shrinkage to which earlier estimates were subject. Although telescoping was also undoubtedly reduced, and this would, by itself, tend to reduce estimates, the impact of reducing telescoping was apparently smaller than the impact of reducing case loss due to forgetting. Evidence internal to this survey directly indicates that a one year recall period yields larger estimates than a five year recall period; compare figures in the right half of Table 2 with their counterparts in the left half. This phenomenon, where less behavior is reported for a longer recall period than would be expected based on results obtained when using a shorter period, also has been observed in surveys of self-reported use of illicit drugs.⁵¹

Furthermore, basing estimates on Rs reports about DGUs in which they were personally involved also increases the estimates. One of the surprises of this survey was how few Rs were willing to report a DGU which involved some other member of their household. Eighty-five percent of the reports of DGUs we obtained involved the original R, the person with whom the interviewer first spoke. Given that most households contain more than one adult eligible to be interviewed, it was surprising that in a DGU-involved household the person who answered the phone would consistently turn out to be the individual who had been involved in the DGU. Our strong suspicion is that many Rs feel that it is not their place to tell total strangers that some other member of their household has used a gun for self-protection. Some of them are willing to tell strangers about an incident in which they were themselves involved, but apparently few are willing to "inform" on others in their household. Still others may not have been aware of DGUs involving other household members. Evidence internal to the present survey supports this speculation, since person-based estimates are 66 to 77% higher than household-based estimates; a figure that suggests that there was more complete reporting of DGUs involving the original respondent than those involving other household members.⁵² For this reason, previous surveys including those which yielded only household-based estimates, four of the six gun surveys which yielded usable annual estimates, and all of those which

⁵¹ See Jerald Bachman & Patrick O'Malley, *When Four Months Equal a Year: Inconsistencies in Student Reports of Drug Use*, 45 PUB. OPINION Q. 536, 539, 543 (1981).

⁵² See Table 2.

were national in scope, probably substantially underestimated DGUs.

We also had information on the number of times that DGU-involved households had experienced DGUs during the five year recall period. While it was necessary in computing previous estimates to conservatively assume that each DGU-involved person or household had experienced only one DGU, our evidence indicates that repeat experiences were not uncommon, with 29.5% of DGU-involved households reporting more than one DGU within the previous five years. The average number of DGUs in this time span was 1.5 per DGU-involved household. This information alone could account for a roughly 50% increase in DGU incidence estimates based on the five year recall period.

Finally, our survey was superior to the NCVS in two additional ways: it was free of the taint of being conducted by, and on behalf of, employees of the federal government, and it was completely anonymous.

It would be incorrect to say that the present estimates are inconsistent with those derived from the earlier gun surveys. Avoiding apples-and-oranges comparisons, compare figures from Table 2 with earlier results summarized in Table 1. The household prevalence figures from the national Hart and Mauser surveys, which used a DGU question most similar to the one used in the present survey, indicate that in 1990, 3.8% of households reported a DGU involving a gun of any kind in the previous five years⁵³ and in 1981, 4% reported a DGU involving a handgun in the previous five years.⁵⁴ The past-five-years, household-based "% Used" figures in Table 2 indicate 3.9% for all guns, and 3.0% for handguns. Where directly comparable, the present results are within sampling error of the results of the best two previous surveys. Indeed, the consistency is remarkable given the substantial differences among the surveys and the twelve year difference between the Hart survey and the current one. Further, the only prior survey with person-based estimates and a *one* year recall period, the 1976 Field poll in California, yielded a 1.4% prevalence figure for handguns,⁵⁵ compared to 1.0% in the present survey.⁵⁶

With a sample size of 4,977, random sampling error of the estimates is small. For example, the all-guns prevalence percent used *A* estimates, with a 95% confidence interval, are plus or minus 0.32% for past year, person; 0.35% for past year, household; 0.50% for past five

⁵³ Mauser, *supra* note 19.

⁵⁴ Peter D. Hart Research Associates, Inc., Questionnaire used in October 1981 Violence in America Survey, with marginal frequencies (1981).

⁵⁵ See Table 1, note A.

⁵⁶ See Table 2, second column.

years, person; and 0.54% for past five years, household. Given how small these are already, even increasing samples to the size of the enormous ones in the NCVS could produce only slight reductions in sampling error.

Are these estimates plausible? Could it really be true that Americans use guns for self-protection as often as 2.1 to 2.5 million times a year? The estimate may seem remarkable in comparison to expectations based on conventional wisdom, but it is not implausibly large in comparison to various gun-related phenomena. There are probably over 220 million guns in private hands in the U.S.,⁵⁷ implying that only about 1% of them are used for defensive purposes in any one year—not an impossibly high fraction. In a December 1993 Gallup survey, 49% of U.S. households reported owning a gun, and 31% of adults reported personally owning one.⁵⁸ These figures indicate that there are about 47.6 million households with a gun, with perhaps 93 million, or 49% of the adult U.S. population living in households with guns, and about 59.1 million adults personally owning a gun. Again, it hardly seems implausible that 3% (2.5 million/93 million) of the people with immediate access to a gun could have used one defensively in a given year.

Huge numbers of Americans not only have access to guns, but the overwhelming majority of gun owners, if one can believe their statements, are willing to use a gun defensively. In a December 1989 national survey, 78% of American gun owners stated that they would not only be willing to use a gun defensively in some way, but would be willing to *shoot* a burglar.⁵⁹ The percentage willing to use a gun defensively in *some* way, though not necessarily by shooting someone, would presumably be even higher than this.

Nevertheless, having access to a gun and being willing to use it against criminals is not the same as actually doing so. The latter requires experiencing a crime under circumstances in which the victim can get to, or already possesses, a gun. We do not know how many such opportunities for crime victims to use guns defensively occur each year. It would be useful to know how large a fraction of crimes with direct offender-victim contact result in a DGU. Unfortunately, a large share of the incidents covered by our survey are probably outside the scope of incidents that realistically are likely to be reported to either the NCVS or police. If the DGU incidents reported in the present survey are not entirely a subset within the pool of cases

⁵⁷ KLECK, *supra* note 18, at 50 (extrapolating up to 1994, from 1987 data).

⁵⁸ David W. Moore & Frank Newport, *Public Strongly Favors Stricter Gun Control Laws*, 340 THE GALLUP POLL MONTHLY 18 (1994).

⁵⁹ Quinley, *supra* note 36.

covered by the NCVS, one cannot meaningfully use NCVS data to estimate the share of crime incidents which result in a DGU. Nevertheless, in a ten state sample of incarcerated felons interviewed in 1982, 34% reported having been "scared off, shot at, wounded or captured by an armed victim."⁶⁰ From the criminals' standpoint, this experience was not rare.

How could such a serious thing happen so often without becoming common knowledge? This phenomenon, regardless of how widespread it really is, is largely an invisible one as far as governmental statistics are concerned. Neither the defender/victim nor the criminal ordinarily has much incentive to report this sort of event to the police, and either or both often have strong reasons *not* to do so. Consequently, many of these incidents never come to the attention of the police, while others may be reported but without victims mentioning their use of a gun. And even when a DGU is reported, it will not necessarily be recorded by the police, who ordinarily do not keep statistics on matters other than DGUs resulting in a death, since police record-keeping is largely confined to information helpful in apprehending perpetrators and making a legal case for convicting them. Because such statistics are not kept, we cannot even be certain that a large number of DGUs are *not* reported to the police.

The health system cannot shed much light on this phenomenon either, since very few of these incidents involve injuries.⁶¹ In the rare case where someone is hurt, it is usually the criminal, who is unlikely to seek medical attention for any but the most life-threatening gunshot wounds, as this would ordinarily result in a police interrogation. Physicians in many states are required by law to report treatment of gunshot wounds to the police, making it necessary for medically treated criminals to explain to police how they received their wounds.

Finally, it is now clear that virtually none of the victims who use guns defensively tell interviewers about it in the NCVS. Our estimates imply that only about 3% of DGUs among NCVS Rs are reported to interviewers.⁶² Based on other comparisons of alternative survey estimates of violent events with NCVS estimates, this high level of under-reporting is eminently plausible. Loftin and Mackenzie reported that rapes might be thirty-three times as frequent as NCVS estimates indicate, while spousal violence could easily be twelve times as high.⁶³

There is no inherent value to knowing the exact number of

⁶⁰ WRIGHT & ROSSI, *supra* note 43, at 155.

⁶¹ See Table 3, Panels A, E.

⁶² The 85,000 DGUs estimated from the NCVS, divided by the 2.5 million estimate derived from the presented survey equals .03.

⁶³ Loftin & MacKenzie, *supra* note 27, at 22-23.

DGUs any more than there is any value to knowing the exact number of crimes which are committed each year. The estimates in Table 2 are at best only rough approximations, which are probably too low. It is sufficient to conclude from these numbers that DGU is very common, far more common than has been recognized to date by criminologists or policy makers, and certainly far more common than one would think based on any official sources of information.

What does "very common" mean? One natural standard of comparison by which the magnitude of these numbers could be judged is the frequency with which guns are used for criminal purposes. The highest annual estimate of criminal gun use for the peak year of gun crime is the NCVS estimate for 1992, when there were an estimated 847,652 violent crime incidents in which, according to the victim, at least one offender possessed a gun.⁶⁴ This NCVS figure is not directly comparable with our DGU estimates because our DGU estimates are restricted only to incidents in which the gun was actually used by the defender, as opposed to incidents in which a victim merely possessed a gun. Many of the "gun crimes" in the NCVS, on the other hand, do not involve the gun actually being used by the criminal. Thus, the NCVS estimate of "gun crimes" overstates the number of crimes in which the offender actually used the gun. The only "gun crimes" reported in NCVS interviews that one can be confident involved offenders actually using guns are those in which they shot at a victim; but these were only 16.6% of "handgun crimes" reported in the NCVS from 1987 to 1992.⁶⁵

Another 46.8% of the "handgun crimes" are labelled "weapon present" cases by the Bureau of Justice (BJS)⁶⁶ and an unknown fraction of these *could* involve actual use of a gun in a threat; but NCVS data do not permit us to know just how large a fraction. For these cases, the relevant NCVS interview items are ambiguous as to whether the gun was used to threaten a victim. Response category four of question fourteen ("How were you threatened?") of the NCVS Crime Incident Report reads: "Weapon present or threatened with weapon"⁶⁷ When this category is recorded by the interviewer, it is impossible to determine whether the victim was actually threatened with a gun or merely reported that the offender possessed a gun. In the remaining 36.6% of the "handgun crimes,"⁶⁸ there is no indica-

⁶⁴ Computed from U.S. BUREAU OF JUSTICE STATISTICS, *supra* note 26, at 82-83.

⁶⁵ RAND, *supra* note 17, at 2.

⁶⁶ *Id.*

⁶⁷ U.S. BUREAU OF JUSTICE STATISTICS, *supra* note 26, at 126.

⁶⁸ 100%, minus the 16.6% where the victim was shot at, minus the 46.8% where the victim reported a "weapon present or threatened with a weapon" = 36.6%.

tion at all that the gun allegedly possessed by the offender was actually used.

Even the presence of a weapon is debatable, since victims are not asked why they thought the offender possessed a gun or if they saw a gun. This raises the possibility that some victims assumed that the offender had a gun, or inferred it from a bulge in the offender's clothing, or accepted the word of an offender who was bluffing about having a gun.

Thus, somewhere between 16.6% and 63.4%⁶⁹ of NCVS-defined "handgun crime" victimizations involve the gun actually being used in an attack or threat. Applying these figures to the estimates of 847,652 gun crime incidents and 689,652 handgun crime incidents, we can be confident that in 1992 there were at least 140,710 nonfatal crime incidents in which offenders used guns, 114,482 with handguns or about 157,000 total gun crime incidents, and 129,000 with handguns, when one includes gun homicides.⁷⁰ Or, generously assuming that all of the ambiguous "weapon present" cases involved guns being used to threaten the victim, estimates of 554,000 total, fatal and nonfatal, gun crime incidents and 451,000 handgun crime incidents are obtained.

All of these estimates are well short of even the most conservative estimates of DGUs in Table 2. The best estimates of DGUs (first two columns), even if compared to the more generous estimates of gun crimes, are 4.6 times higher than the crime counts for all guns, and 4.2 times higher for handguns, or 3.9 and 3.4, respectively, if the more conservative *B* estimates of DGU are used. In sum, DGUs are about three to five times as common as criminal uses, even using generous estimates of gun crimes.

There is good reason to believe that survey estimates of both criminal and defensive gun uses, including the DGU estimates presented here, are too low. Cook has shown that NCVS estimates of gunshot wounds are far too low.⁷¹ Our estimates of DGUs are probably also too low, partly because, unlike the NCVS, our survey did not cover adolescents, the age group most frequently victimized in violence. Furthermore, our use of telephone surveying excludes the 5% of the nation's households without telephones, households which are disproportionately poor and/or rural. Low income persons are more likely to be crime victims,⁷² while rural persons are more likely to own

⁶⁹ 16.6% plus the 46.8% in the ambiguous "weapon present" category.

⁷⁰ FEDERAL BUREAU OF INVESTIGATION, U.S. DEPARTMENT OF JUSTICE, CRIME IN THE UNITED STATES 1992—UNIFORM CRIME REPORTS 18, 58 (1993).

⁷¹ Philip J. Cook, *The Case of the Missing Victims: Gunshot Woundings in the National Crime Survey*, 1 J. QUANTITATIVE CRIMINOLOGY 91 (1985).

⁷² U.S. BUREAU OF JUSTICE STATISTICS, *supra* note 26, at 33.

guns and to be geographically distant from the nearest police officer.⁷³ Both groups therefore may have more opportunities to use guns for self-protection and excluding them from the sample could contribute to an underestimation of DGU.

Both parameters also are subject to underestimation due to intentional respondent underreporting. It is also probable that typical survey Rs are more reluctant to tell interviewers about questionable acts that they themselves have committed, such as threatening another person with a gun for purportedly defensive reasons, than they are to report criminal acts that other people have committed *against* them. Assuming this is correct, it would imply that DGUs, even in the best surveys, are underreported more than gun crime victimizations, and that correcting for underreporting would only increase the degree to which DGUs outnumber gun crimes.

The only known significant source of overestimation of DGUs in this survey is "telescoping," the tendency of Rs to report incidents which actually happened earlier than the recall period, such as reporting a six year old incident as having happened in the past five years. It is likely that telescoping effects are more than counterbalanced by Rs who actually experienced DGUs failing to report them. Nevertheless, it is worth discussing how much effect telescoping could have on these estimates. In evaluating the ability of crime victims to recall crime events in victim surveys, the U.S. Census Bureau selected a sample of crimes that were reported to the police, and then interviewed the victims of these known crime events. Using a twelve month recall period (the same as we used in the present survey), they surveyed victims who had been involved in crimes which had actually occurred *thirteen to fourteen* months before the interview, i.e., one or two months before the recall period. Of these ineligible crimes, 21% were telescoped forward—wrongly reported as having occurred in the twelve month recall period.⁷⁴

Since the months just before the start of the recall period will show the highest rates of telescoping, the rate should be even smaller for crimes which occurred earlier. Nevertheless, even if it is assumed that the 21% rate applied to events that occurred as much as one year earlier, thirteen to twenty-four months before the interview, telescoping could inflate the DGU estimates for a one year recall period by only 21%. Adjusting the 2.5 million DGU estimate downward for telescoping effects of this magnitude would reduce it to about 2.1 mil-

⁷³ KLECK, *supra* note 18, at 57.

⁷⁴ Richard W. Dodge, *The Washington, D.C. Recall Study*, in 1 THE NATIONAL CRIME SURVEY: WORKING PAPERS: CURRENT AND HISTORICAL PERSPECTIVES 14 (Robert G. Lehnen & Wesley G. Skogan eds., 1981).

lion (2.5 million/1.21=2.1 million), an adjustment which would have no effect on any of our conclusions. Telescoping would inflate estimates based on the five year recall period even less, since the ratio of memory loss errors over telescoping errors increases as the recall period lengthens.⁷⁵ Nevertheless, it should be stressed that this is just a numerical demonstration. There is no reason to believe that these modest telescoping effects outweigh the effects of Rs failing to report DGUs, and therefore, no reason to believe that these estimates are even slightly too high.

III. THE NATURE OF DEFENSIVE GUN USE

A total of 222 sample cases of DGUs against humans were obtained. For nine of these, the R broke off discussion of the incident before any significant amount of detail could be obtained, other than that the use was against a human. This left 213 cases with fairly complete information. Although this dataset constitutes the most detailed body of information available on DGU, the sample size is nevertheless fairly modest. While estimates of DGU frequency are reliable because they are based on a very large sample of 4,977 cases, results pertaining to the details of DGU incidents are based on 213 or fewer sample cases, and readers should treat these results with appropriate caution.

Apart from the sample size, the results of this survey also are affected by sample censoring. Beyond the incidents our interviewers were told about, there were almost certainly other DGUs which occurred within the recall period but which Rs did not mention to interviewers. In debriefings by the authors, almost all of our interviewers reported that they had experienced something like the following: they asked the key DGU question, which was followed by a long silence on the other end of the line, and/or the R asking something like "Who wants to know?" or "Why do you want to know?" or some similarly suspicious remark, followed by a "no" answer. In contrast, only one interviewer spoke with a person he thought was inventing a nonexistent incident. One obvious implication is that the true frequency of DGU is probably even higher than our estimates indicate. Another is that the incidents which were reported might differ from those that were not.

We believe that there are two rather different kinds of incidents that are especially likely to go unreported: (1) cases that Rs do not want to tell strangers on the phone, because the Rs deem them legally

⁷⁵ Henry S. Woltman et al., *Recall Bias and Telescoping in the National Crime Survey*, in 2 THE NATIONAL CRIME SURVEY: WORKING PAPERS: METHODOLOGICAL STUDIES 810 (Robert G. Lehnen & Wesley G. Skogan eds., 1984); Sudman & Bradburn, *supra* note 40.

or morally dubious or they think the interviewer would regard them that way; and (2) relatively minor cases that Rs honestly forget about or did not think were serious enough to qualify as relevant to our inquiries. Thus, in addition to the mostly legitimate and serious cases covered in our sample, there are still other, less legitimate or serious DGU incidents that this or any other survey are likely to miss. This supposition would imply two kinds of bias in our descriptive results: (1) our DGUs would look more consistently "legitimate" than the entire set of all DGUs actually are; and (2) our DGUs would look more serious, on average, than the entire set of DGUs really are. These possibilities should be kept in mind when considering the following descriptive information.

Table 3 summarizes what our sample DGU incidents were like. The data support a number of broad generalizations. First, much like the typical gun crime, many of these cases were relatively undramatic and minor compared to fictional portrayals of gun use. Only 24% of the gun defenders in the present study reported firing the gun, and only 8% report wounding an adversary.⁷⁶ This parallels the fact that only 17% of the gun crimes reported in the NCVS involve the offender shooting at the victim, and only 3% involve the victim suffering a gunshot wound.⁷⁷

Low as it is, even an 8% wounding rate is probably too high, both because of the censoring of less serious cases, which in this context would be cases without a wounding, and because the survey did not establish how Rs knew they had wounded someone. We suspect that in incidents where the offender left without being captured, some Rs "remembered with favor" their marksmanship and assumed they had hit their adversaries. If 8.3% really hit their adversaries, and a total of 15.6% fired at their adversaries, this would imply a 53% (8.3/15.6) "incident hit rate," a level of combat marksmanship far exceeding that typically observed even among police officers. In a review of fifteen reports, police officers inflicted at least one gunshot wound on at least one adversary in 37% of the incidents in which they intentionally fired at someone.⁷⁸ A 53% hit rate would also be triple the 18% hit rate of criminals shooting at crime victims.⁷⁹ Therefore, we believe that even the rather modest 8.3% wounding rate we found is probably too high, and that typical DGUs are less serious or dramatic in their consequences than our data suggest. In any case, the 8.3% figure was pro-

⁷⁶ See Table 3, panel A.

⁷⁷ RAND, *supra* note 17.

⁷⁸ WILLIAM A. GELLER & MICHAEL S. SCOTT, POLICE EXECUTIVE RESEARCH FORUM, DEADLY FORCE: WHAT WE KNOW 100-106 (1993).

⁷⁹ RAND, *supra* note 17.

duced by just seventeen sample cases in which Rs reported that they wounded an offender.

About 37% of these incidents occurred in the defender's home, with another 36% near the defender's home.⁸⁰ This implies that the remaining 27% occurred in locations where the defender must have carried a gun through public spaces. Adding in the 36% which occurred *near* the defender's home and which may or may not have entailed public carrying, 36 to 63% of the DGUs entailed gun carrying.

Guns were most commonly used for defense against burglary, assault, and robbery.⁸¹ Cases of "mutual combat," where it would be hard to tell who is the aggressor or where both parties are aggressors, would be a subset of the 30% of cases where assault was the crime involved. However, only 19% of all DGU cases involved *only* assault and no other crime where victim and offender could be more easily distinguished. Further, only 11% of all DGU cases involved only assault and a male defender—we had no information on gender of offenders—some subset of these could have been male-on-male fights. Thus, very few of these cases fit the classic mutual combat model of a fight between two males. This is not to say that such crimes where a gun-using combatant might claim that his use was defensive are rare, but rather that few of them are in this sample. Instead, cases where it is hard to say who is victim and who is aggressor apparently constitute an additional set of questionable DGUs lying largely outside of the universe of more one-sided events that our survey methods could effectively reach.

This survey did not attempt to compare the effectiveness of armed resistance with other forms of victim self-protection, since this sort of work has already been done and reviewed earlier in this paper. Panels D and E nevertheless confirm previous research on the effectiveness of self-defense with a gun—crime victims who use this form of self-protection rarely lose property and rarely provoke the offender into hurting them. In property crime incidents where burglary, robbery, or other thefts were attempted, victims lost property in just 11% of the cases. Gun defenders were injured in just 5.5% of all DGU incidents. Further, in 84% of the incidents where the defender was threatened or attacked, it was the offender who first threatened or used force. In *none* of the eleven sample cases where gun defenders were injured was the defender the first to use or to threaten force. The victim used a gun to threaten or attack the offender only *after* the offender had already attacked or threatened them and usually after

⁸⁰ See Table 3, Panel B.

⁸¹ *Id.* at Panel C.

the offender had inflicted the injury. There is no support in this sample for the hypothesis that armed resistance provokes criminals into attacking victims; this confirms the findings of prior research.⁸²

While only 14% of *all* violent crime victims face offenders armed with guns,⁸³ 18% of the gun-using victims in our sample faced adversaries with guns.⁸⁴ Although the gun defenders usually faced unarmed offenders or offenders with lesser weapons, they were more likely than other victims to face gun-armed criminals. This is consistent with the perception that more desperate circumstances call forth more desperate defensive measures. The findings undercut the view that victims are prone to use guns in "easy" circumstances which are likely to produce favorable outcomes for the victim regardless of their gun use.⁸⁵ Instead, gun defenders appear to face more difficult circumstances than other crime victims, not easier ones.

Nevertheless, one reason crime victims are willing to take the risks of forcefully resisting the offender is that most offenders faced by victims choosing such an action are unarmed, or armed only with less lethal weapons. Relatively few victims try to use a gun against adversaries who are themselves armed with guns. According to this survey, offenders were armed with some kind of weapon in 48% of DGU incidents but had guns in only 18% of them.⁸⁶

The distribution of guns by type in DGUs is similar to that of guns used by criminals. NCVS and police-based data indicate that about 80% of guns used in crime are handguns,⁸⁷ and the present study indicates that 80% of the guns used by victims are handguns.⁸⁸

Incidents where victims use a gun defensively are almost never gunfights where both parties shoot at one another. Only 24% of the incidents involved the defender firing their gun, and only 16% involved the defender shooting *at* their adversary.⁸⁹ In only 4.5% of the cases did the offender shoot at the defender.⁹⁰ Consequently, it is not surprising that only 3% of all the incidents involved both parties shooting at each other.

Among our sample cases, the offenders were strangers to the de-

⁸² Kleck, *supra* note 3, at 7-9; Kleck & DeLone, *supra* note 3, at 75-77.

⁸³ U.S. BUREAU OF JUSTICE STATISTICS, *supra* note 26, at 83.

⁸⁴ See Table 3, Panel F.

⁸⁵ For a related speculation, see UNDERSTANDING AND PREVENTING VIOLENCE, *supra* note 15, at 266.

⁸⁶ *Id.*

⁸⁷ U.S. BUREAU OF JUSTICE STATISTICS, *supra* note 26, at 83; U.S. FEDERAL BUREAU OF INVESTIGATION, *supra* note 70, at 18.

⁸⁸ See Table 3, Panel H.

⁸⁹ *Id.* at Panel A.

⁹⁰ *Id.* at Panel G.

fender in nearly three quarters of the incidents.⁹¹ We suspect that this again reflects the effects of sample censoring. Just as the NCVS appears to detect less than a tenth of domestic violence incidents,⁹² our survey is probably missing many cases of DGU against family members and other intimates.

While victims face multiple offenders in only about 24% of *all* violent crimes,⁹³ the victims in our sample who used guns faced multiple offenders in 53% of the incidents.⁹⁴ This mirrors the observation that criminals who use guns are also more likely than unarmed criminals to face multiple victims.⁹⁵ A gun allows either criminals or victims to handle a larger number of adversaries. Many victims facing multiple offenders probably would not resist at all if they were without a gun or some other weapon. Another possible interpretation is that some victims will resort to a defensive measure as serious as wielding a gun only if they face the most desperate circumstances. Again, this finding contradicts a view that gun defenders face easier circumstances than other crime victims.

Another way of assessing how serious these incidents appeared to the victims is to ask them how potentially fatal the encounter was. We asked Rs: "If you had *not* used a gun for protection in this incident, how likely do you think it is that you or someone else would have been *killed*? Would you say almost certainly *not*, probably not, might have, probably would have, or almost certainly would have been killed?" Panel K indicates that 15.7% of the Rs stated that they or someone else "almost certainly would have" been killed, with another 14.2% responding "probably would have" and 16.2% responding "might have."⁹⁶ Thus, nearly half claimed that they perceived some significant chance of someone being killed in the incident if they had not used a gun defensively.

It should be emphasized that these are just stated perceptions of participants, not objective assessments of actual probabilities. Some defenders might have been bolstering the justification for their actions by exaggerating the seriousness of the threat they faced. Our cautions about sample censoring should also be kept in mind—minor, less life-threatening events are likely to have been left out of this sample, either because Rs forgot them or because they did not think them important enough to qualify as relevant to our inquiries.

⁹¹ *Id.* at Panel I.

⁹² Loftin & MacKenzie, *supra* note 27, at 22-23.

⁹³ U.S. BUREAU OF JUSTICE STATISTICS, *supra* note 26, at 82.

⁹⁴ See Table 3, Panel J.

⁹⁵ Cook, *supra* note 4.

⁹⁶ See Table 3, Panel K.

If we consider only the 15.7% who believed someone almost certainly would have been killed had they not used a gun, and apply this figure to estimates in the first two columns of Table 2, it yields national annual estimates of 340,000 to 400,000 DGUs of any kind, and 240,000 to 300,000 uses of handguns, where defenders stated, if asked, that they believed they almost certainly had saved a life by using the gun. Just how many of these were truly life-saving gun uses is impossible to know. As a point of comparison, the largest number of deaths involving guns, including homicides, suicides, and accidental deaths in any one year in U.S. history was 38,323 in 1991.⁹⁷

Finally, we asked if Rs had reported these incidents to the police, or if the police otherwise found out about them; 64% of the gun-using victims claimed that the incidents had become known to the police. This figure should be interpreted with caution, since victims presumably want to present their use of guns as legitimate and a willingness to report the incident to the police would help support an impression of legitimacy. Rs who had in fact not reported the incident to the police might have wondered whether a "no" reply might not lead to discomfiting follow-up questions like "why not?" (as indeed it does in the NCVS). Further, it is likely that some Rs reported these incidents but did not mention their use of a gun.

IV. WHO IS INVOLVED IN DEFENSIVE GUN USE?

Finally, this Article will consider what sorts of people use guns defensively, and how they might differ from other people. Table 4 presents comparisons of five groups: (1) "defenders," i.e., people who reported using a gun for defense; (2) people who personally own guns but did not report a DGU; (3) people who do not personally own a gun; (4) people who did not report a DGU, regardless of whether they own guns; and (5) all people who completed the full interview.

Some of the earlier gun surveys asked the DGU question only of Rs who reported owning a gun. The cost of this limitation is evident from the first two rows of Table 4. Nearly 40% of the people reporting a DGU did not report personally owning a gun at the time of the interview. They either used someone else's gun, got rid of the gun since the DGU incident, or inaccurately denied personally owning a gun. About a quarter of the defenders reported that they did not even have a gun in their household at the time of the interview. Another possibility is that many gun owners were falsely denying their ownership of the "incriminating evidence" of their DGU.

⁹⁷ NATIONAL SAFETY COUNCIL, ACCIDENT FACTS 11 (1994). This assumes that 95% of "legal intervention" deaths involved guns.

Many of the findings in Table 4 are unsurprising. Gun defenders are more likely to carry a gun for self-protection, consistent with the large share of DGUs which occurred away from the defender's home. Obviously, they were more likely to have been a victim of a burglary or robbery in the past year, a finding which is a tautology for those Rs whose DGU was in connection with a robbery or burglary committed against them in the preceding year. They were also more likely to have been a victim of an assault since becoming an adult.

Defenders are more likely to believe that a person must be prepared to defend their homes against crime and violence rather than letting the police take care of it compared to either gun owners without a DGU and nonowners. Whether this is cause or consequence of defenders' defensive actions is impossible to say with these data.

Some might suspect that DGUs were actually the aggressive acts of vengeful vigilantes intent on punishing criminals. If this were true of gun defenders as a group, one might expect them to be more supportive of punitive measures like the death penalty. In fact, those who reported a DGU were no more likely to support the death penalty than those without such an experience, and were somewhat *less* likely to do so compared with gun owners as a group. Similarly, gun defenders were no more likely than other people to endorse the view that the courts do not deal harshly enough with criminals.

Perhaps the most surprising finding of the survey was the large share of reported DGUs that involved women. Because of their lower victimization rates and lower gun ownership rates, one would expect women to account for far less than half of DGUs. Nevertheless, 46% of our sample DGUs involved women. This finding could be due to males reporting a lower fraction of actual DGUs than women. If a larger share of men's allegedly DGUs were partly aggressive actions, a larger share would be at the "illegitimate" end of the scale and thus less likely to be reported to interviewers. Further, women may be more likely than men to report their DGUs because they are less afraid of prosecution. Consequently, although there is no reason to doubt that women use guns defensively as often as this survey indicates, it is probable that males account for a larger number and share of DGUs than these data indicate.

A disproportionate share of defenders are African-American or Hispanic compared to the general population and especially compared to gun owners. Additionally, defenders are disproportionately likely to reside in big cities compared to other people, and particularly when compared to gun owners, who reside disproportionately in rural areas and small towns. Finally, defenders are disproportionately likely to be single. These patterns are all presumably due to the higher rates

of crime victimization among minorities, big city dwellers, and single persons.⁹⁸ On the other hand, defenders are not likely to be poor. The effect of higher victimization among poor people may be cancelled out by the lower gun ownership levels among the poor.⁹⁹

One might suspect that, despite instructions not to report such events, some of the Rs reporting a DGU might have been describing an event which occurred as part of their occupational activities as a police officer, a member of the military, or a security guard. This could not have been true for more than a handful of our DGU cases, since only 2.4% (five sample cases) involved a person who had this type of occupation. Even these few cases may have occurred off-duty and thus would not necessarily be occupational DGUs. Gun defenders were in fact somewhat *less* likely to have a gun-related occupation than other gun owners.

V. CONCLUSION

If one were committed to rejecting the seemingly overwhelming survey evidence on the frequency of DGU, one could speculate, albeit without any empirical foundation whatsoever, that nearly all of the people reporting such experiences are simply making them up. We feel this is implausible. An R who had actually experienced a DGU would have no difficulty responding with a "no" answer to our DGU question because a "no" response was not followed up by further questioning. On the other hand, lying with a false "yes" answer required a good deal more imagination and energy. Since we asked as many as nineteen questions on the topic, this would entail spontaneously inventing as many as nineteen plausible and internally consistent bits of false information and doing so in a way that gave no hint to experienced interviewers that they were being deceived.

Suppose someone persisted in believing in the anomalous NCVS estimates of DGU frequency and wanted to use a "dishonest respondent" hypothesis to account for estimates from the present survey that are as much as thirty times higher. In order to do this, one would have to suppose that twenty-nine out of every thirty people reporting a DGU in the present survey were lying. There is no precedent in criminological survey research for such an enormous level of intentional and sustained falsification.

The banal and undramatic nature of the reported incidents also undercuts the dishonest respondent speculation. While all the incidents involved a crime, and usually a fairly serious one, only 8% of the

⁹⁸ U.S. BUREAU OF JUSTICE STATISTICS, *supra* note 26, at 25-26, 31, 38-39.

⁹⁹ KLECK, *supra* note 18, at 56.

alleged gun defenders claimed to have shot their adversaries, and only 24% claim to have fired their gun. If large numbers of Rs were inventing their accounts, one would think they would have created more exciting scenarios.

By this time there seems little legitimate scholarly reason to doubt that defensive gun use is very common in the U.S., and that it probably is substantially more common than criminal gun use. This should not come as a surprise, given that there are far more gun-owning crime victims than there are gun-owning criminals and that victimization is spread out over many different victims, while offending is more concentrated among a relatively small number of offenders.

There is little legitimate reason to continue accepting the NCVS estimates of DGU frequency as even approximately valid. The gross inconsistencies between the NCVS and all other sources of information make it reasonable to suppose that all but a handful of NCVS victims who had used a gun for protection in the reported incidents refrained from mentioning this gun use. In light of evidence on the injury-preventing effectiveness of victim gun use, in some cases where the absence of victim injury is credited to either nonresistance or some unarmed form of resistance, the absence of injury may have actually been due to resistance with a gun, which the victim failed to mention to the interviewer.

The policy implications of these results are straightforward. These findings do *not* imply anything about whether moderate regulatory measures such as background checks or purchase permits would be desirable. Regulatory measures which do not disarm large shares of the general population would not significantly reduce beneficial defensive uses of firearms by noncriminals. On the other hand, prohibitionist measures, whether aimed at all guns or just at handguns, are aimed at disarming criminals and noncriminals alike. They would therefore discourage and presumably decrease the frequency of DGU among noncriminal crime victims because even minimally effective gun bans would disarm at least some noncriminals. The same would be true of laws which ban gun carrying. In sum, measures that effectively reduce gun availability among the noncriminal majority also would reduce DGUs that otherwise would have saved lives, prevented injuries, thwarted rape attempts, driven off burglars, and helped victims retain their property.

Since as many as 400,000 people a year use guns in situations where the defenders claim that they "almost certainly" saved a life by doing so, this result cannot be dismissed as trivial. If even one-tenth of these people are accurate in their stated perceptions, the number of lives saved by victim use of guns would still exceed the total number

of lives taken with guns. It is not possible to know how many lives are actually saved this way, for the simple reason that no one can be certain how crime incidents would have turned out had the participants acted differently than they actually did. But surely this is too serious a matter to simply assume that practically everyone who says he believes he saved a life by using a gun was wrong.

This is also too serious a matter to base conclusions on silly statistics comparing the number of lives taken with guns with the number of criminals *killed* by victims.¹⁰⁰ Killing a criminal is not a benefit to the victim, but rather a nightmare to be suffered for years afterward. *Saving* a life through DGU would be a benefit, but this almost never involves killing the criminal; probably fewer than 3,000 criminals are lawfully killed by gun-wielding victims each year,¹⁰¹ representing only about 1/1000 of the number of DGUs, and less than 1% of the number of purportedly life-saving DGUs. Therefore, the number of justifiable homicides cannot serve as even a rough index of life-saving gun uses. Since this comparison does not involve any measured benefit, it can shed no light on the benefits and costs of keeping guns in the home for protection.¹⁰²

¹⁰⁰ Arthur L. Kellermann & Donald T. Reay, *Protection or Peril?*, 314 *NEW ENG. J. MED.* 1557 (1986).

¹⁰¹ KLECK, *supra* note 18, at 111-117.

¹⁰² See *id.* at 127-129 for a more detailed critique of these "junk science" statistics. See UNDERSTANDING AND PREVENTING VIOLENCE, *supra* note 15, at 267 for an example of a prestigious source taking such numbers seriously.

Table 1
FREQUENCY OF DEFENSIVE GUN USE IN PREVIOUS SURVEYS⁸⁰

Survey:	Field	Bordua	Cambridge Reports	DMia	DMib	Hart	Ohio
Area:	California	Illinois	U.S.	U.S.	U.S.	U.S.	Ohio
Year of Interviews:	1976	1977	1978	1978	1978	1981	1982
Population covered:	Noninst. adults	Noninst. adults	Noninst. adults	Registered voters	Registered voters	Registered voters	"Residents"
Gun Type Covered:	Handguns	All guns	Handguns	All guns	All guns	Handguns	Handguns
Recall Period:	Ever/1,2 yrs.	Ever	Ever	Ever	Ever	5 yrs.	Ever
Excluded Uses Against Animals?	No	No	No	No	Yes	Yes	No
Excluded Military, Police Uses?	Yes	No	No	Yes	Yes	Yes	No
Defensive question asked of:	All Rs	All Rs	Protection hgun owners	All Rs	All Rs	All Rs	Rs in hgun households
Defensive question refers to:	Respondent	Respondent	Respondent	Household	Household	Household	Respondent
% Who Used	1.4/3/8.6 ^a	5.0	18	15	7	4	6.5
% Who Fired Gun	2.9	n.a.	12	6	n.a.	n.a.	2.6
Implied number of def. gun uses ^b	3,052,717	1,414,544	n.a.	2,141,512	1,098,409	1,797,461	771,043

80 FIELD INSTITUTE, TABULATIONS OF THE FINDINGS OF A STUDY OF HANDGUN OWNERSHIP AND ACCESS AMONG A CROSS SECTION OF THE CALIFORNIA ADULT PUBLIC (1976); BORDUA ET AL., *supra* note 43; CAMBRIDGE REPORTS, *supra* note 36; DMI (DECISION/MAKING/INFORMATION), ATTITUDES OF THE AMERICAN ELECTORATE TOWARD GUN CONTROL (1979); Peter D. Hart Research Associates, Inc., *supra* note 54; Ohio, *supra* note 36; Quinley, *supra* note 36; Mauser, *supra* note 19; the Gallup polls of 1991 and 1993, L.A. Times poll, and Tarrance poll were taken from a search of the DIALOG Public Opinion online computer database.

Table 1 (continued)
FREQUENCY OF DEFENSIVE GUN USE IN PREVIOUS SURVEYS

Survey:	Time/CNN	Mauser	Gallup	Gallup	L.A. Times	Tarrance
Area:	U.S.	U.S.	U.S.	U.S.	U.S.	U.S.
Year of Interviews:	1989	1990	1991	1993	1994	1994
Population covered:	"Firearm owners"	Residents	Noninst. Adults	Noninst. Adults	Noninst. Adults	Noninst. Adults
Gun Type Covered:	All guns	All guns	All guns	All guns	All guns	All guns
Recall Period:	Ever	5 years	Ever	Ever	Ever	5 years
Excluded Uses Against Animals?	No	Yes	No	No	No	Yes
Excluded Military, Police Uses?	Yes	Yes	No	Yes	Yes	Yes
Defensive question asked of:	Gun owners	All Rs	Rs in hgun hshlds	Gun owners	All	All
Defensive question refers to:	Respondent	Hshld.	Respondent	Respondent	Respondent	Respondent/Household
% Who Used	n.a.	3.79	8	11	8 ^c	1/2 ^d
% Who Fired Gun	9-16 ^c	n.a.	n.a.	n.a.	n.a.	n.a.
Implied number of def. gun uses ^b	n.a.	1,487,342	777,153	1,621,377	3,609,682	764,036

Notes:

- a. 1.4% in past year, 3% in past two years, 8.6% ever.
 b. Estimated annual number of defensive uses of guns of all types against humans, excluding uses connected with military or police duties, after any necessary adjustments were made, for U.S., 1993. Adjustments are explained in detail in Kleck (1994).
 c. Covered only uses outside the home.
 d. 1% of respondents, 2% of households.
 e. 9% fired gun for self-protection, 7% used gun "to scare someone."
 An unknown share of the latter could be defensive uses not overlapping with the former.

Table 2
PREVALENCE AND INCIDENCE OF CIVILIAN DEFENSIVE GUN USE, U.S., 1988-1993^a

Recall Period: Base: Gun Types:	Past Year			Past Five Years		
	Person	Household		Person	Household	
	All Guns	Handguns	All Guns	All Guns	Handguns	Handguns
Weighted						
Sample Cases	A: ^c B: ^c	66 56	49 40	79 68	55 46	148 129
% Used ^b	A: B:	1.326 1.125	0.985 0.804	1.587 1.366	1.105 0.924	2.974 2.592
Persons/ Households	A: B:	2,549,862 2,163,519	1,893,079 1,545,371	1,540,405 1,325,918	1,072,434 896,945	2,885,822 2,515,345
Annual Uses	A: B:	2,549,862 2,163,519	1,893,079 1,545,371	1,540,405 1,325,918	1,072,434 896,945	515,345 505,069

Population Bases: Estimated resident population, age eighteen and over, U.S., April, 1993: 190,538,000; estimated households (assuming the 1992-1993 percentage increase was the same as the 1991-1992 increase): 97,045,525 (U.S. Bureau of the Census 1993, at 17, 55).

Notes:

- a. Defensive uses of guns against humans by civilians (i.e. excluding uses by police officers, security guards or military personnel). All figures are based on weighted data (see text).
- b. Percent of persons (households) with at least one defensive gun use during the five years (one year) preceding the interview.
- c. A estimates are based on all reported defensive gun uses reported in the survey. B estimates are based on only cases with no indications that the case might not be a genuine defensive gun use.

Table 3
THE NATURE OF DEFENSIVE GUN USE INCIDENTS^a

	%
A. What the Defender Did with the Gun^b	
Brandished or showed gun	75.7
Verbally referred to gun	57.6
Pointed gun at offender	49.8
Fired gun (including warning shots)	23.9
Fired gun at offender, trying to shoot him/her	15.6
Wounded or killed offender	8.3
B. Location of Incident	
In defender's home	37.3
Near defender's home	35.9
At, in, near home of friend, relative, neighbor	4.2
Commercial place (bar, gas station, office, factory)	7.5
Parking lot, commercial garage	4.5
School (in building, on school property, playground)	0.3
Open area, on street or public transportation	7.4
Other locations	2.3
C. Type of Crime Defender Thought Was Being Committed^b	
Burglary	33.8
Robbery	20.5
Other theft	6.2
Trespassing	14.8 ^c
Rape, sexual assault	8.2
Other assault	30.4
Other crime	9.5
D. Did Offender Get Away with Money or Property?	
% of property crimes with property loss:	11.0
E. Violence Directed at Defender	
No threat or attack	46.8
Threatened only	32.3
Attacked but not injured	15.3
Attacked and injured	5.5
(In incidents where defender was threatened or attacked): Who was first to threaten or use force?	
Defender	15.3
Offender	83.5
Someone else	1.3
F. Offender's Weapons^b	
None (unarmed)	51.9
Weapon	48.1
Handgun	13.4
Other gun	4.5
Knife	17.8
Other sharp object	2.0
Blunt object	9.9
Other weapon	5.9
G. Shooting	
Did offender shoot at defender?	
% of all incidents	4.5
% of incidents with offender armed with gun	26.2
Did both parties shoot?	
% of all incidents	3.1
H. Type of Gun Used by Defender	
Revolver	38.5
Semi-automatic pistol	40.1
Other, unspecified handgun	1.1
Rifle	6.4
Shotgun	13.9

I. Relationship of Offender to Defender		
Stranger		73.4
Casual acquaintance		8.3
Neighbor		1.3
Boyfriend, girlfriend		1.0
Other friend, coworker		1.0
Brother, sister		0.0
Son, daughter		0.5
Husband, wife		3.1
Other relationship		4.2
Unknown		7.3
J. Number of Offenders		
1		47.2
2		26.1
3-4		17.6
5-6		4.0
7 or more (includes 3 cases where defender could only say there was a very large number)		5.0
K. Defender's Perceived Likelihood that Someone Would Have Died Had Gun Not Been Used for Protection		
Almost certainly not		20.8
Probably not		19.3
Might Have		16.2
Probably would have		14.2
Almost certainly would have		15.7
Could not say		13.7
L. Were Police Informed of Incident or Otherwise Find Out?		64.2

Notes:

a. Table covers only defensive uses against persons, and excludes nine cases where respondents refused to provide enough detail to confirm incidents as genuine defensive uses.

b. Percentages will sum to more than 100% because respondents could legitimately select or report more than one category.

c. Only 3.7% of incidents involved trespassing as *only* crime.

Table 4
COMPARISON OF DEFENDERS WITH OTHER PEOPLE
(WEIGHTED PERCENTAGES)

	Sample ^a				All Persons
	Defenders	No-DGU Gun owners	Non-owners	No DGU	
Personally owns gun	59.5	100.0	0.0	23.9	25.5
Gun in household	79.0	100.0	16.3	36.3	37.9
Carries gun for protection	47.3	23.3	2.1	7.3	8.8
Burglary victim, past year	19.3	4.5	4.9	4.9	5.5
Robbery victim, past year	12.9	1.9	2.0	2.1	2.5
Assault victim as adult	46.8	29.3	18.3	21.5	22.5
Nights away from home, monthly average					
0	8.2	5.2	8.9	8.2	8.2
1-6	27.5	24.1	33.4	31.5	31.2
7-13	23.2	28.2	22.7	23.8	23.9
14+	42.0	42.5	35.0	36.8	36.6
Must depend on self rather than cops	77.0	69.7	50.0	55.0	55.8
Supports death penalty	72.4	85.2	65.8	70.5	70.6
Courts not harsh enough	75.2	78.9	71.5	74.0	74.0
Gender (% male)	53.7	75.4	37.1	46.4	46.7
Age					
18-24	25.7	10.2	14.3	13.1	13.5
25-34	36.9	21.6	22.6	22.1	22.6
35-44	20.6	26.8	25.2	25.5	25.4
45-64	14.2	30.6	25.9	27.3	26.8
65+	2.6	10.9	12.1	12.0	11.7
Race					
White	72.4	90.3	83.0	84.6	84.1
Black	16.8	5.1	9.7	8.6	8.9
Hispanic	8.0	3.2	4.9	4.6	4.8
Other	2.8	1.3	2.4	2.2	2.1
Place of Residence					
Large City (over 500,000)	32.5	14.7	24.7	22.2	22.6
Small city	29.8	32.2	27.7	29.4	29.3
Suburb of large city	25.5	28.1	32.6	31.3	31.1
Rural area	12.2	24.9	15.1	17.2	17.0
Marital Status					
Married	50.8	69.1	57.5	60.5	60.1
Widowed	0.6	2.2	6.5	6.2	6.0
Divorced/Separated	15.3	10.9	11.2	11.8	12.0
Never married	33.3	17.8	24.8	21.4	21.9
Annual Household Income					
Under \$15,000	12.3	7.4	15.3	13.6	13.5
\$15,000-29,999	30.1	23.2	27.9	26.9	27.2
\$30,000-44,999	22.2	30.3	23.0	24.5	24.4
\$45,000-59,999	18.6	17.8	20.0	19.2	19.2
\$60,000-79,999	7.9	12.1	8.0	8.9	8.9
\$80,000 or more	8.8	9.2	5.8	6.8	6.9
Gun-related Occupation	2.4	4.9	2.0	3.2	3.1

Notes:

a. "Defenders" are persons who reported a defensive gun use against another person in the preceding five years, excluding uses in connection with military, police, or security guard duties. This sample includes nine cases where such a use was reported, but the respondent did not provide further details.

"No-DGU gun owners" are persons who report personally owning a gun but did not report a defensive gun use.

"Nonowners" are persons who did not report personally owning a gun and who did not report a defensive gun use. These persons may, however, live in a household where others own a gun.

"No DGU" are persons who did not report a defensive gun use, regardless of whether they reported owning a gun.