

ORIGINAL ARTICLE

Reality check: using newspapers, police reports, and court records to assess defensive gun use

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Objective: To identify legitimate defensive gun uses (DGUs), and provide a reality check on previous estimates of the rate of DGUs by using a novel approach based on newspaper reports and police and court records. Previous estimates have relied on self report, differ by a factor of 10 or more, and are viewed as highly controversial.

Design and setting: The reported uses of firearms in a newspaper covering roughly the Phoenix metropolitan area over almost a 3.5 month period were examined, supplemented where necessary by police and court records.

Results: Two DGUs involving killing assailants and one involving firing at an assailant were found. The three DGUs stemmed from cases of "mutual combat" or exposed bystanders to gunfire.

Conclusions: These findings cast doubt on rates of DGUs reported in an influential study by Kleck and Gertz, which predict that the police should have known about 98 DGU killings or woundings and 236 DGU firings at adversaries during the time the newspaper was surveyed. The findings reported here were closer to predictions based on the National Crime Victimization Survey, which suggest that the police should have known about eight DGU killings or woundings and 19 DGU firings at adversaries.

Kleck and Gertz conducted a nationally representative telephone survey of defensive gun use (DGU) and estimated that each year guns are used defensively by 1.125% of civilians, which they acknowledge is higher than the DGU rate of 0.09% reported in the National Crime Victimization Survey (NCVS).^{1,2} Hemenway argued that "Many [of Kleck and Gertz's] respondents who claim to have used a gun successfully in the past year may be unconsciously improving on the truth—for example, on situations in which they were afraid, they retrieved a gun, and nothing bad happened".³ Kleck and Gertz responded that they required that reports of DGU be substantiated by answers to 19 follow up questions about the details of the incident, and that it was unlikely that many respondents could quickly invent an internally consistent story.⁴

Kingman, Arizona—A 57-year-old man was sentenced to nine years in prison for the shooting death of a transient in a Wal-Mart store parking lot. George Ross Billingham Jr had claimed he was acting in self-defense when he shot to death Randy Ray Davis, 37, on Dec 30, 1998. But Billingham, Davis and some friends had been drinking all morning before the shooting. Prosecutor Tom Donaldson described the slaying as "a stupid drunken incident that resulted in murder".⁵

Billingham's case would have been misclassified as DGU by Kleck and Gertz, because they "made no effort to assess either the lawfulness or morality of the respondent's defensive actions", only whether respondent confronted an adversary, used a gun in a meaningful way, thought a specific crime was being committed, and was not using the gun as part of his or her occupation.¹

The controversy over the annual rate of DGUs has not been resolved, despite calls for reality checks, new methods, and better empirical data, and despite attempts to determine if differences in survey questions are responsible for divergent results.^{3,4,6–8} One trend has been to examine the relative rate

of offensive versus defensive uses.^{9–11} Another has been to investigate whether DGU woundings tend not to appear in official statistics because wounded criminals do not go to emergency rooms.¹² A third has been to expand on Kleck and Gertz's interview questions and ask respondents, including citizens who report having used a gun and criminals who report having been shot, to describe the circumstances to get an understanding of the types of DGUs that occur and how legitimate they may be.^{9,10,13,14}

In the present study we contribute to this third trend, but we used a new method that did not rely on self reports. We searched for legitimate DGUs in a newspaper covering a major metropolitan area over almost a 3.5 month period, supplemented where necessary by police and court records. The newspaper in effect represented a daily survey of several million people for cases of DGU.

METHOD

We examined the *Tribune* newspaper, published in Tempe, Arizona. There were reports of gun uses in eight of the 24 cities in Maricopa County, in un-annexed land in Maricopa County, in one city in neighboring Pinal County, and in adjacent Native American tribal lands. Almost 90% of the incidents occurred in Maricopa County, which includes the city of Phoenix. The population of Maricopa County was approximately 2 806 100. Phoenix accounted for 42.59% of the county population and for 48% of the gun uses.

We collected daily newspaper reports of gun deaths for 103 days in 1998 (1 April through 31 May; 17 and 18 June; 1 July through 9 August). We supplemented these with reports of woundings by gun beginning on 30 April (74 days), and firings of guns on 17 and 18 June and beginning again on 11 July (32 days). These time periods were chosen for convenience.

The first author initially classified each instance of gun use as either self defense or one of 10 other uses: suicide,

Abbreviations: DGU, defensive gun use; NCVS, National Crime Victimization Survey

domestic violence, accidents, road rage, arguments or fights, gang activity, unknown motive (including drive-by shootings and suspected gang activity), robbery, shooting at police officers, and use as part of occupation. If, after discussion, there was any reasonable ambiguity that an instance might be self defense, we followed up with one or more of the following: (a) a request to the police department for a copy of the police report, (b) a call to the detective in charge of the case to obtain his or her professional judgment of whether it was self defense, (c) a call to the county attorney's office to determine if the case was being prosecuted, (d) a call to the superior court to determine the outcome of the case. Calls were made by the second author who identified himself as a researcher from Arizona State University studying gun use. Rapport was easily established with detectives and office personnel, who were forthcoming with information. In a few cases, our follow up continued for several years as the case progressed. Overall, we followed up on 28 (34.6%) of the individuals in 20 (32.3%) of the cases.

RESULTS

We identified 43 individuals who were killed by a gun, 29 who were wounded by a gun, and nine who fired a gun. These 81 instances of gun use occurred in 62 separate cases. We followed up with the police report in six cases, the detective in 12 cases, the county attorney in four cases, and the superior court in three cases (three cases included two types of follow up and one involved three types).

Cases with evidence of self defense

We found two cases involving DGU. The first involved two off-duty security guards and an assailant, and occurred at noon on Friday 10 July at a busy gas station in a low income neighborhood in Phoenix. The newspaper report read, "[One guard] was waiting for his friend outside near the gas pumps when he argued with another man holding a gun. [The first guard] then pulled his gun, the shouting escalated, and they started shooting. When his friend heard the gunshots from inside the store, he ran out, saw the man who had apparently shot his friend, and shot him dead".¹⁵ The county attorney's office reported (4 August 2000) that no charges had been filed against either security guard, the detective reported (3 June 2001) that the case had been ruled "justifiable use of force", and that "it could have been a robbery attempt that started it", and the sizeable police report, which included interviews with numerous witnesses, presented the first guard's testimony that the assailant held a gun down by his own side while he pushed the guard up against a wall apparently intending to rob him, and the guard grabbed the assailant's gun and went for his own gun. Several shots were fired and one narrowly missed the second guard as he came out the door. This case accounted for one DGU death and one DGU firing, each by a security guard, and one wounding by the assailant that we did not deem self defense.

The second case involved a fight between two families. The paper reported that police had been called to these neighbors' houses nine times in the past year. On Monday 20 July at 9:30 pm, another fight broke out among at least six individuals according to neighbors, and the paper reported that according to police "within minutes, the men were hitting each other, yelling and chasing each other across the street. [One 23 year old man] hit [another] on the head with a beer bottle. Bleeding from the cut, he went into his house. [The first man] got his gun...walked into [the second man's] house and pointed the gun at [the second man's son], but was immediately shot by an unidentified man".¹⁶ After being wounded, the first man fled back toward his house, collapsed in the street, and fired 15 rounds into the house, as did

another man. This case accounted for one DGU wounding, and two firings that we did not deem self defense.

Case of unsubstantiated claim of self defense

A man accidentally shot himself, reporting that he was drawing his gun "to protect himself from a man threatening him with a knife".¹⁷ We did not follow this up because we assumed no charges would be filed and there would be no witnesses.

Cases of discounted claims of self defense

There were four cases where an individual claimed DGU, but the evidence contradicted it. In two cases one man killed another claiming it was self defense. We followed one case to the county attorney and the superior court where he was convicted of first degree murder. We followed the second to the detective who reported he was charged with first degree murder.

The third involved a man who fired a shotgun at a car driving by his house at 3 am, wounding two teenagers and claiming he felt threatened. We followed this case to the superior court where he was charged with aggravated assault.

The fourth case involved a man who heard a noise in his attic one afternoon and fired several shots into his ceilings because he felt threatened. No intruder was found by police. We followed this case to the superior court where he was sentenced to probation for disorderly conduct.

Cases with no evidence or claims of self defense

There were seven suicides, three in which the person killed an intimate before turning the gun on himself, and one attempted suicide. Five other individuals were killed, one wounded, and one fired at in separate domestic cases. These included a mother killing her young daughter, a man killing his girlfriend, a man killing his wife (followed to the county attorney), a man killing his lover's husband in which the wife and another man were charged with conspiracy, a man killing another man over a woman (followed to the detective), a man wounded by his ex-girlfriend's cousins, and a man who fired at his wife during an argument. There were two accidental deaths and four accidental woundings in six separate cases.

Finally there were 17 other homicides, 16 other woundings, and three other firings (in 27 separate cases) that did not involve self defense. Six cases involved "road rage" (one was followed to the detective), eight cases involved fights or arguments (seven were followed to the police report or the detective), three involved suspected gang activity (one was followed to the police report and county attorney), six involved homicides where either the motive was unknown, drug dealing was suspected, or it was a "drive-by" shooting (three were followed to detectives), two involved robbery, and one involved shooting at a police officer.

Cases of gun use as part of occupation

Police killed six individuals in five cases, wounded one, and fired at another while on-duty, and an on-duty security guard at a hospital wounded a man who threatened him with a bottle.

DISCUSSION

Most citizens who buy a gun for protection probably envision using it to ward off sexual assaults, home invasions, or muggings. Of the two cases we found that included DGU, one involved a home invasion, but this was in the context of "mutual combat", in which a fight escalated into gun violence and both parties might claim they used their guns in self defense when in most observers' judgment both parties would be deemed blameworthy.¹ The other involved a daylight mugging in a crowded area, in which the victim went for his own gun. This exposed bystanders to gunfire and resulted in the victim being shot, which casts doubt on whether the victim's gun use in this case was beneficial.

An important limitation of our method is the likelihood of underestimating DGUs. One way this could happen is selectivity of newspaper reporting. The Uniform Crime Report indicates that there were six homicides committed by civilians with guns (including security personnel but not police) that the police deemed justifiable in Maricopa County in 1998.¹⁸ This translates to 1.7 justifiable homicides predicted during the 103 days we observed for gun deaths. The newspaper reported two such homicides (both by security guards, one off-duty and one on-duty). This suggests that underreporting of DGU killings was not a problem in our data, although the newspaper could not be expected to report all DGU woundings and firings.

A second way underestimation could occur is cases not being reported to police. One detective told us (27 August 2001), "There are cases of self defense where the defender panics and leaves the body". We were careful to check any newspaper reports of bodies found to determine if there was evidence it may have been in self defense. DGUs in which the assailant was wounded but either did not seek treatment or was able to conceal the circumstances, or in which no one was wounded could easily not come to the attention of police.

Even with these underestimation problems, our findings can serve as a reality check on the 1.125% national rate of DGU reported by Kleck and Gertz. While we should be cautious in extrapolating Kleck and Gertz' rate to one area of Arizona, in 1995 Arizona was above the national average of homes with loaded firearms, and in 1999 ranked sixth in rate of firearm deaths.¹⁹ The state has a "shall issue" concealed carry law. The rate of criminal homicides by gun (which excludes suicides, accidents, and justifiable homicides) was higher in Maricopa County than statewide in 1998, and the rates for both county and state during April through September matched the yearly rates.¹⁸

Kleck and Gertz estimated that 2.81% of DGUs are killings or woundings. (This is the hit rate of criminals shooting at their victims, which they argued is more realistic than the rate of 8.3% that their subjects reported because that would mean citizens were better marksmen than police.) Their subjects reported that 15.6% of DGUs involved firing at assailants, and 64.2% were known to the police. Kleck and Gertz's data would predict 77 cases of DGU killings or woundings in Phoenix during the 74 days in which we surveyed for homicides and woundings, 49 of which the police should know about, and 184 firings during the 32 days in which we also surveyed for firings, 118 of which police should know about. Phoenix accounted for half of gun uses, so we should expect the police to know about 98 DGU killings or woundings and 236 DGU firings.

We found only three DGUs. Two involved killing or wounding an assailant, which, if Kleck and Gertz are correct, would mean that 98% of DGU killings and woundings that the police knew about went unreported in the newspaper, and one involved firing at an assailant, which would mean that 99.6% of DGU firings that the police knew about went unreported. This casts doubt on Kleck and Gertz' rate of DGUs. Applying Kleck and Gertz' estimates to the 0.09% DGU rate in the NCVS yields a total of eight DGU killings or woundings and 19 DGU firings at adversaries that the police should have known about. Our lower rates (two killings/woundings, one firing) could reasonably be due to unreported cases and cases we discounted for lack of evidence, and thus they seem to corroborate the NCVS rate. Our rates may also be relevant to the related issue of whether there are more DGUs than criminal gun uses.⁹⁻¹¹

There may have been other DGUs that involved only drawing a gun to frighten an assailant. The newspaper does not report those, so we are unaware of the number. If that is

Key points

- Previous estimates of defensive gun use (DGU) have relied on self report, differ by a factor of 10 or more, and are viewed as highly controversial.
- We examined newspaper reports of gun use in a large metropolitan area, supplemented by police and court records.
- There were two DGUs involving killing assailants and one involving firing at an assailant.
- These DGUs stemmed from cases of "mutual combat" or exposed bystanders to gunfire.
- An influential study by Kleck and Gertz predicts that we should have found 98 DGU killings or woundings and 236 DGU firings at adversaries.
- Our findings were closer to the National Crime Victimization Survey, which predicts we should have found eight DGU killings or woundings and 19 DGU firings at adversaries.

the most prevalent type of DGU, it would imply that unloaded guns may be more effective at preventing crime than loaded guns, because we found no clear cases in which a gun was fired in self defense that did not involve "mutual combat" or firing the gun in a socially irresponsible manner so as to endanger both oneself and others.

Authors' affiliations

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