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Shootings of and by Chicago Police: Uncommon Crises--Part II: Shootings of Police, Shooting Correlates and Control Strategies

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In 1977, the Chicago Police Department opened its files concerning police-involved shootings to inspection by a public interest group, the Chicago Law Enforcement Study Group. This represents the first time a major city's police force has allowed its shooting investigation files to be viewed by the public. The following article is based on excerpts from that group's report. The study is presented in two parts. The first set of material, presented in 72 J. CRIM. L. & C. 1813 (1981), *dealt with the methodology, shooting types and racial factors involved in the shootings. The set of data presented in this issue deals with shootings of police officers, variations in shootings over time and recommendations for shooting control strategies.*

THE EDITORS

SHOOTINGS OF AND BY CHICAGO POLICE: UNCOMMON CRISES
PART II: SHOOTINGS OF POLICE, SHOOTING CORRELATES AND CONTROL STRATEGIES

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Unlike much of the empirical literature on police shootings, this article devotes attention not only to police use of deadly force against civilians but to police victimization as well.[1] This broadened focus stems from the conviction that minimizing police victimization is an equally important goal to minimizing inappropriate police use of deadly force, and from the belief that the latter objective can best be accomplished by understanding as fully as possible the risks that officers face of being shot. Following a description and analysis of the incidents in which 187 Chicago police officers were shot—by civilians, by themselves, and by fellow officers—from 1974 through 1978, this article will examine factors that might be associated with and help explain annual variations in the number of civilians shot by Chicago police. Finally, we

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1 Of the few other recent studies that examine the causes and prevention of shootings of police officers, the best are Fyfe, *Always Prepared: Police Off-Duty Guns*, 452 ANNALS 72 (1980); Margarita, *Killing the Police*, 452 ANNALS 63 (1980); Margarita, *Police As Victims of Violence*, 5 JUST. SYS. J. 218 (1980); M. MARGARITA, CRIMINAL VIOLENCE AGAINST POLICE IN THE UNITED STATES (forthcoming).

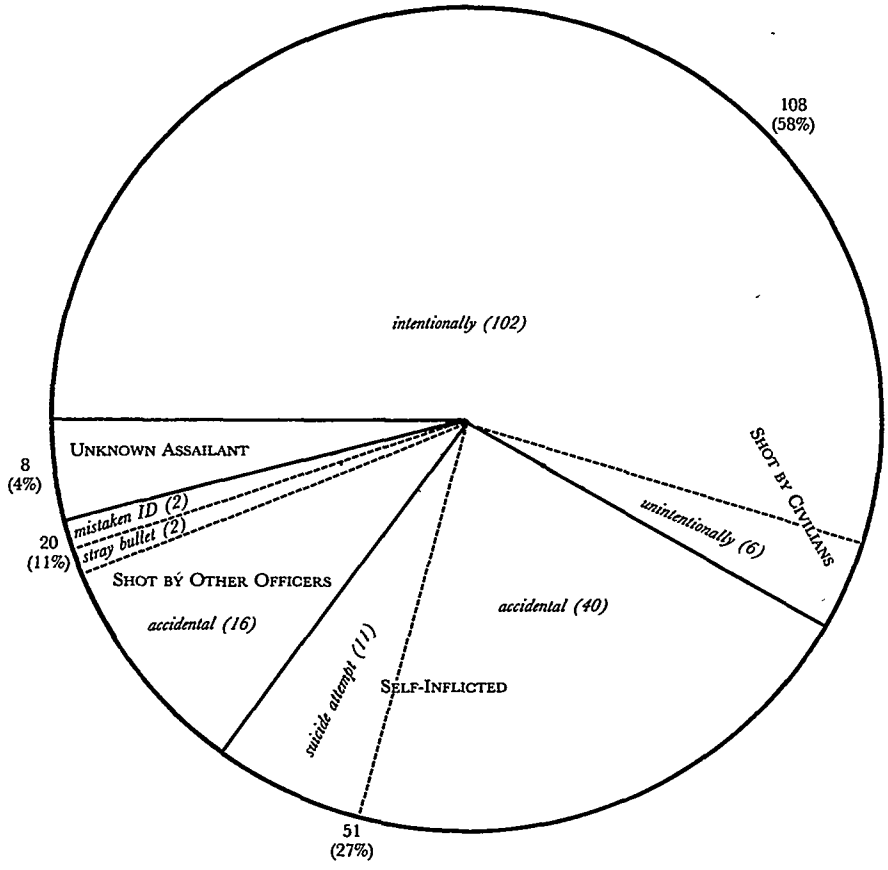
will briefly discuss a variety of strategies that police administrators in Chicago and other jurisdictions may find helpful in reducing the level of police-involved shooting.

I. SHOOTINGS OF POLICE OFFICERS

As was the case with our typology of officers' reasons for shooting civilians in part I of this article, our typology of officer victimization (Figure 1) is framed with shooting reduction in mind. Since officer protection strategies are likely to vary according to whether the officer is shot intentionally or accidentally, the typology uses the intent of the perpetrator as one of its key divisions. Apart from suicides, however, all shootings of police by themselves or other officers were reported to be *unintentional*, and virtually all shootings of police by civilians were re-

FIGURE 1

TYPOLOGY: CHICAGO POLICE SHOT, 1974-1978
(N = 187)



ported to be *intentional*; so for convenience the typology's principal separation of shootings is according to the perpetrator: civilians, other officers, and self-inflicted shootings.

The typology can be fleshed out briefly, after which two issues which emerge from the data will be considered: why so many police are shot while off duty, and racial patterns in shootings of police by civilians. Perhaps the most striking feature of Figure 1 is the number of officer victims who were shot by themselves or their colleagues: between thirty-eight and forty-two percent[2] of the 187 officers who were shot from 1974 through 1978 were shot by themselves or other officers. This rather alarming realization may help broaden the perspective which one normally brings to a consideration of the undeniable hazards of police work.

A. SHOOTING TYPES

(1) Police Shot by Civilians

Shootings of officers by civilians occurred in a wide array of situations, ranging from suspected crimes in progress to officers shot with their own guns by a spouse or lover. To a much greater extent than shootings of civilians by police, shootings of police by civilians take place off duty. While 23% of all *civilian* victims were shot by off-duty police, 44% of the 108 police who were shot by civilians were off duty at the time. Six of the 108 officers (5.6%) were unintentionally[3] shot by civilians. All six of the unintentional shootings of police by civilians seemed to involve some degree of carelessness on the part of the officer. Four of these incidents were "accidental" (*i.e.*, the civilian did not intend to pull the trigger); one involved "mistaken identity;" and one was the result of "dry firing" a weapon that was thought to be unloaded.

(2) Self-Inflicted Shootings

Self-inflicted shootings by police, which accounted for 27% (51) of all officer gunshot victims, occurred in three basic situation types: suicides; accidental discharges during the maintenance or other "non-combat" handling of the weapon; and accidental firings in the course of

[2] The range results from the eight officers whose assailants were not ascertainable from the source documents. If all eight officers were shot by civilians, the 38% figure would apply. If all eight officers were shot by themselves or fellow officers, the higher percentage would be accurate.

[3] The characterization of these shootings as unintentional is based on several elements: the civilians claimed that they shot unintentionally, they were not criminally charged, and officer testimony corroborated the lack of intent.

attempting arrests. Strategies for reducing the incidence of such shootings are suggested later in this article.

The Chicago Police Department reported ten officer suicides and one suicide attempt for the five year study period. (These numbers exclude any suicides accomplished by means other than firearms because we do not have data on officer non-gun suicides.) While this figure computes to an annual average of only two gun-suicides for the Department, the officer gun-suicide rate is actually slightly higher than the overall rate (all means) for Chicago's adult population. In 1977, Chicagoans 18 years of age and older committed suicide at the rate of approximately 13 persons per 100,000 residing in the city.[4] The average gun-suicide rate for Chicago police officers, however, is 15 per 100,000 officers. Whether this difference in rates represents a significant difference between the general populace and police is difficult to judge based on the number of officer suicides that occurred and the exclusion of non-gun suicides. One could assume with some confidence that some additional number of Chicago police officers committed suicide during the study period by means other than guns, and that the total Chicago police officer suicide rate is actually higher than 15 per 100,000. The stresses, odd and variable working hours and other aspects of police work might help explain a disproportionate suicide rate for police officers.[5]

(3) Police Shot by Fellow Officers

Eleven percent (20) of all officers shot from 1974 through 1978 were shot by other police officers. Shootings of police by fellow officers resulted primarily from accidental gun discharges. Some incidents seemed to be the result of bad gun handling habits by officers (*e.g.*, an officer was struck by a ricocheted bullet from a gun that was holstered in the half-cocked position by a fellow officer during roll call). Other incidents resulted from stray bullets during shootouts and possibly from poor tactical coordination among several officers on a crime scene (*e.g.*, officers getting in the line of fire).

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[4] Telephone conversation with James Walker, Division of Planning, Center for Health Statistics, State of Illinois (Dec. 30, 1980).

[5] Edward Donovan, founder of the Boston Stress Counseling Program for Police Officers, indicated in a recent filmed interview that he believes "suicides are more prevalent in law enforcement professions than in any other, although often these incidents are not recorded as suicides." The interview is part of a police training film, *Interview with Edward Donovan on Stress*, produced by Harper and Row, reported in NCJRS, SELECTIVE NOTIFICATION OF INFORMATION 24 (Dec. 1980). New York City police officers suffer a reported suicide rate twice as high as that of the City's white male population. Fyfe, Shots Fired: A Typological Examination of New York City Police Firearms Discharges, 1971-1975, 476 (1978) (unpublished Ph.D. dissertation, School of Criminal Justice, S.U.N.Y. at Albany).

B. SHOOTING PATTERNS

A few noteworthy patterns concerning shootings of police officers emerge from the data, most notably those associated with off-duty shootings and with the race of the participants. Any attempt to devise strategies for reducing the number of police officers who are shot should probably take into account the fact that a majority (52%) of the officer victims are off-duty when shot.[6] This is important because the kinds of control strategies available may differ significantly for on- and off-duty officers. Table 1 shows the number of on- and off-duty officers shot, according to shooting type.

TABLE 1

POLICE SHOT IN CHICAGO, 1974-1978: DUTY STATUS OF OFFICER VICTIMS BY SHOOTING TYPE

SHOOTING TYPE		DUTY STATUS OF OFFICER VICTIMS		
		On	Off	Total
(1) By civilian	Number	61	47	108
	Row %	56%	44%	100%
(2) Self-Inflicted	*Accidental*	10	30	40
		25%	75%	100%
	Suicide	0	11	11
		—	100%	100%
(3) By other Officers	Number	15	5	20
	Row %	75%	25%	100%
TOTAL	Number	86	93	179[a]
	Row%	48%	52%	100%

[a] Not ascertained = 8.

It is noteworthy that, while a majority of all officer victims are off-duty when shot, the duty status of officers varies considerably by shooting type. Only self-inflicted gun shot wounds are mainly an off-duty phenomenon (75% of the accidentals and all of the suicides occurred during the officers' time off). The large number of self-inflicted shootings that occur while officers are off-duty is a key explanation for why so large a percentage of all officer victims are off-duty when shot. Since many self-inflicted wounds are the result of gun maintenance (an off-duty activity), it is not particularly surprising that most of the self-inflicted shootings are off-duty events. Shootings by fellow officers, which

[6] We indicated above that 44% of the officers shot *by civilians* were off-duty at the time of their injuries.

are relatively few in number, are predominantly an on-duty phenomenon. Shootings by civilians are closer to being evenly divided between on- and off-duty events, as Table 1 shows.

In addition to the concentration of off-duty officers among self-inflicted shooting victims, two other explanations can be offered for the large number of officers who are shot while off duty. Both concern shootings of police by civilians. First, Police Department policy requires off-duty officers to take appropriate police action when they encounter possible criminal activity. Police officers traditionally have considered their responsibility for off-duty action to include aggressive intervention (termination of crimes and arrest of suspects) and not just careful observation and notification of on-duty police. Yet off-duty police may be unprepared for a confrontation with armed opponents, who frequently will have the element of surprise in their favor. Moreover, off-duty officers usually intervene in a suspected crime on their own initiative rather than at the request of a member of the public, which may deprive off-duty officers of some "legitimacy" and may make forceful resistance to their authority more likely.[7] The arming of off-duty police, a practice which is receiving increasing criticism,[8] facilitates such aggressive action. The result of large-scale, aggressive intervention by off-duty officers is that off-duty police run almost the same risk of being shot by civilians as do on-duty officers.

Interestingly, however, the circumstances in which on- and off-duty officers are shot by civilians vary, as Table 2 indicates. On-duty officers were shot by civilians most commonly when the officers responded to "person with a gun" or "shots fired" incidents. Suspected armed robberies accounted for less than one on-duty officer victim per year (total of four during the study period). In contrast, 33% (15) of all off-duty officer victims were shot in connection with alleged armed robberies. This difference stems from the fact that in many of the off-duty robbery related shootings the officers were the robbery victims and thus were at a tactical disadvantage. A relatively large percentage (20%) of the incidents in which off-duty officers were shot involved officers who were not taking police action (*e.g.*, officers shot during their own domestic quarrels).

The second explanation we can offer for the large number of off-duty police who are shot by civilians leads once again to a consideration of race and police shootings, but this time in relation to officer victimization. The explanation is that the number of off-duty officer victims is swelled by the large number of off-duty black officer victims—who live and spend most of their off-duty time in relatively high-crime areas of the city. Off-duty black officers encounter violent crime with some fre-

TABLE 2

INCIDENTS OF OFFICERS SHOT BY CIVILIANS IN CHICAGO, 1974-1978: SITUATION TYPE BY OFFICER DUTY STATUS

SITUATION TYPE[a]	DUTY STATUS OF VICTIM OFFICERS					
	On		Off		Total	
	#	%	#	%	#	%
Armed/strong arm robb.	4	7%	15	33%	19	18%
Person with a gun/shots fired	19	32%	5	11%	24	23%
Handling prisoners	1	2%	0	—	1	1%
Burglary	2	3%	0	—	2	2%
Suspicious person	5	8%	2	4%	7	7%
Person shot/otherwise injured/screaming for help (includes rape)	3	5%	2	4%	5	5%
Nondomestic disturbance, riot, person with deadly weapon other than gun	5	8%	5	11%	10	9%
Domestic disturbance	3	5%	1	2%	4	4%
Traffic offense, auto pursuit/stop	2	3%	2	4%	4	4%
Assault or crime on officer (incl. ambush)	5	8%	2	4%	7	7%
Not police business	1	2%	9	20%	10	9%
Vice (drug or sex) offenses	10	17%	3	7%	13	12%
TOTAL	60[b]	100%	46[c]	100%	106[d]	100%[e]

[a] Based on the officers' initial perceptions, which almost invariably were reported to have been accurate.
[b] Not ascertained = 1.
[c] Not ascertained = 1.
[d] Not ascertained = 2.
[e] Does not total 100% due to rounding.

quency and, accordingly, are shot with some frequency, just as on-duty officers of all races who regularly encounter serious crime suspects are shot with some frequency. Table 3 offers evidence for this explanation. It shows the distribution of on- and off-duty officer victims of different

[7] *See* A. REISS, JR., THE POLICE AND THE PUBLIC (1971).

[8] Fyfe, *supra* note 1.

races, according to the crime level of the districts in which they were shot by civilians.

Table 3 shows both the number of officer victims and the rates at which they were shot, based on the average annual number of officers of a given race shot per 1,000 officers of that race on the Chicago police force. As indicated, shootings of black off-duty officers help account for the large number of off-duty police victims. Black officers constituted 51% of the forty-five off-duty officers who were shot by civilians, despite the fact that only 17.4% of the Police Department's sworn personnel are black. The reported residential pattern of black officers (mostly in medium- and high-crime districts) seems the most likely explanation for the distribution of off-duty black officer victims, 91% of whom were shot by civilians in such districts.[9]

TABLE 3

POLICE SHOT BY CIVILIANS IN CHICAGO, 1974-1978: OFFICER VICTIMS' RACE AND DUTY STATUS, BY CRIME LEVEL OF SHOOTING LOCATION

CRIME LEVEL OF LOCATION		RACE OF OFFICER VICTIMS							
		White		Black		Hispanic		TOTAL	
Low[a]		N= 15		4		1		20	
	Total	Rate[b]= 0.3		0.3		0.8		0.3	
	By Duty	On	Off	On	Off	On	Off	On	Off
		8	7	2	2	1	0	11	9
		0.2	0.1	0.2	0.2	0.8	—	0.2	0.1
Medium[c]		25		12		0		37	
	Total	0.5		1.0		—		0.6	
	By Duty	On	Off	On	Off	On	Off	On	Off
		16	9	6	6	0	0	22	15
		0.3	0.2	0.5	0.5	—	—	0.3	0.2
High[d]		23		22		1		46	
	Total	0.4		1.9		0.8		0.7	
	By Duty	On	Off	On	Off	On	Off	On	Off
		18	5	7	15	0	1	25	21
		0.3	0.1	0.6	1.3	—	0.8	0.4	0.3
TOTAL		63		38		2		103[e]	
	Total	1.2		3.3		1.7		1.5	
	By Duty	On	Off	On	Off	On	Off	On	Off
		42	21	15	23	1	1	58	45
		0.8	0.4	1.3	2.0	0.8	0.8	0.9	0.7

[a] Low-crime districts are those with 200 or less forcible felonies (crimes of personal violence plus burglary) per 10,000 population per year.

[b] All rates = average annual number of officers shot by civilians per 1,000 officers of the indicated race on the Chicago police force.

[c] Medium-crime districts are those with 201-300 forcible felonies per 10,000 population per year.

[d] High-crime districts are those with more than 300 forcible felonies per 10,000 population per year.

[e] Not ascertained = 5.

[9] As is the case with much of the analysis in part I of this article, if multivariate analysis had been possible here, it might have yielded interesting results. In the future, it might be

Besides helping to explain why police are shot while off-duty in relatively large numbers, Table 3 suggests some points about race and shootings of police officers. Without regard to duty status, black officers are nearly three times more likely than white officers to be shot by civilians (rates of 3.3 versus 1.2). (We indicated in part I of this article that black officers were also more likely than white officers to shoot civilians.) Taking duty status into account pinpoints the same difference we saw with shootings of civilians. Among on-duty officers, black police are 1.6 times more likely than their white colleagues to be shot by civilians (rates of 1.3 versus 0.8); but while off duty, black officers are five times as likely as white officers to be shot by civilians (rates of 2.0 versus 0.4). Like the high rate of shooting by off-duty black officers, this phenomenon probably is the product of police officers' residential patterns.

TABLE 4

ON-DUTY POLICE SHOT BY CIVILIANS IN CHICAGO, 1974-1978: UNITS OF ASSIGNMENT OF OFFICER VICTIMS AND BLACK REPRESENTATION IN UNITS

OFFICER VICTIMS' UNITS OF ASSIGNMENT		OFFICERS SHOT BY CIVILIANS	% OF PERSONNEL IN UNIT WHO ARE BLACK
Special Operations Group	#[a]	4	6.2%
	Rate[b]	12.3	
Tactical	#	12	13.5%
	Rate	6.3	
Gang Crimes	#	4	23.4%
	Rate	6.1	
Robbery	#	1	10.3%
	Rate	0.9	
Patrol Division	#	26	18.9%
	Rate	0.7	
Other units	#	10	—
	Rate	—	
TOTAL	#	57	—

[a] Number of *on*-duty officers shot by civilians.

[b] All rates = average annual number of *on*-duty officers shot by civilians per 1,000 officers assigned to the indicated unit. Personnel figures were obtained from a Chicago Police Department computer printout for 1976.

fruitful to see how much of the variance in shootings of officers can be accounted for by the crime rate of their residential area, and then to see if race can account for any additional variance (after controlling for residential area).

We digress for a moment from Table 3 to examine why on-duty white and black officers' chances of being shot by civilians are relatively similar despite the previously noted disproportionate assignment of black patrol division personnel to high hazard police districts. Table 4 suggests one explanation. It shows that black officers are underrepresented in most of the units of the Department whose members bear a high risk of being shot by civilians.[10]

The units depicted in Table 4 in which black officers are "underrepresented" (a lower percentage than the overall Departmental representation of 17.4%)—Special Operations Group, Tactical, and Robbery—experience an annual average of 5.1 on-duty officers shot by civilians per 1,000 officers in those units. By contrast, the two units shown that have an "overrepresentation" of black officers—Gang Crimes and the Patrol Division—have an annual average of 0.8 on-duty officers shot by civilians per 1,000 members of those units. These numbers are fairly small but, if they are reliable indicators, they suggest that on-duty officers in units with relatively few black officers are more than six times as likely to be shot by civilians as officers in units with relatively large numbers of black officers.[11]

Returning to Table 3, we can explore patterns associated with the crime level of the area in which officers of different races were shot while on and off duty. White officers are approximately three times more likely to be shot in high-crime districts when they are on-duty than during their time off, largely because most white officers presumably do not spend much off-duty time in high-crime districts. But black officers, most of whom presumably spend a large amount of their off-duty time in such districts, are more likely to be shot in high-crime districts while *off duty* than during their working hours (rates of 1.3 versus 0.6). Comparing officers of different races, black police are thirteen times more likely than white police to be shot by civilians in high-crime districts while off duty (rates of 1.3 versus 0.1). By contrast, off-duty black officers are only twice as likely as off-duty white officers to be shot by civilians in *low-crime* districts (rates of 0.2 versus 0.1). In medium-crime districts, black officers are 2.5 times more likely than white officers to be shot by civilians while off duty. This difference may be accounted for by the possibility that, while some officers of both races reportedly live in medium-crime districts, a much higher percentage of black than white officers reside in such areas.

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10 See the similar finding regarding shootings by police in part I of this article.

11 Future research utilizing multivariate statistical analysis could examine the variance in the shooting rate due to the "unit of assignment," the degree of "hazardous area assignment," and the officers' race.

The relation between duty status and patterns of victimization for officers of different races will be examined further since some noteworthy associations have already appeared. Table 5 depicts the shooting types, duty status and race of the victim officers. The table permits comparison between the patterns associated with shootings of police by civilians, on the one hand, and shootings by fellow officers and self-inflicted shootings, on the other hand.

Table 5 shows that white and black officers are equally as likely to shoot themselves accidentally while on duty (rates of 0.2) but that *off-duty* black officers are 1.8 times more likely than off-duty white officers to sustain self-inflicted wounds (rates of 0.9 versus 0.5). This difference does not seem to be explainable on the basis of the relatively more dangerous environment in which black officers spend their off-duty time, unless this hazardous environment causes black officers to handle their guns more often, and hence to experience mishaps more often than their white counterparts. The number of police shot by fellow officers is prob-

TABLE 5

POLICE SHOT IN CHICAGO, 1974-1978: RACE AND DUTY STATUS OF OFFICER VICTIMS, BY SHOOTING TYPE

SHOOTING TYPE		RACE OF OFFICER VICTIMS							
		White		Black		Hispanic		TOTAL	
(1) By Civilian	*Total*	#= 64 Rate[a]= 1.2		39 3.4		2 1.7		105[b] 1.6	
	By Duty	On	Off	On	Off	On	Off	On	Off
		42 0.8	22 0.4	16 1.4	23 2.0	1 0.8	1 0.8	59 0.9	46 0.7
(2) Self-Inflicted	*Total*	37 0.7		13 1.1		0 —		50[c] 0.8	
	By Duty	On	Off	On	Off	On	Off	On	Off
		8 0.2	29 0.5	2 0.2	11 0.9	0 —	0 —	10 0.2	40 0.6
(3) By Other Officers	*Total*	10 0.2		6 0.5		1 0.8		17[d] 0.3	
	By Duty	On	Off	On	Off	On	Off	On	Off
		7 0.1	3 0.1	4 0.3	2 0.2	1 0.8	0 —	12 0.2	5 0.1
TOTAL	*Total*	111 2.1		58 5.0		3 2.5		172[e] 2.6	
	By Duty	On	Off	On	Off	On	Off	On	Off
		57 1.1	54 1.0	22 1.9	36 3.1	2 1.7	1 0.8	81 1.2	91 1.4

[a] All rates = average annual number of officers shot per 1,000 officers of the indicated race on the Chicago police force.
[b] Not ascertained = 3.
[c] Not ascertained = 1.
[d] Not ascertained = 3.
[e] Not ascertained = 15.

ably too small to support generalizations, but if any conclusions can be drawn, the data suggest that black officers are once again overrepresented as victims in both on- and off-duty shootings (rates of 0.3 and 0.2, respectively, versus white officer rates of 0.1 for both on- and off-duty incidents).

Table 5 also reveals that white and black officers face different chances of being shot when the categories of self-inflicted shootings and shootings by fellow officers are combined. One third of all black officer victims (19) were shot by themselves or fellow officers. For white officers, however, the corresponding figure is 42%. These figures conceal larger differences based on the officers' duty status. Only 26% of the on-duty white officer victims are shot by themselves or other police, but 59% of the off-duty white officer victims are injured by themselves or their co-workers. On-duty black officer victims are similar to on-duty white officer victims in this aspect (27% were shot by themselves or other police) but are quite different when off duty. Only 36% shot themselves or were shot by other officers, compared to 59% for off-duty white officer victims. These figures may reflect the fact adverted to earlier, that black officers presumably spend more of their off-duty time in high-crime districts than do their white colleagues.

Table 6 considers the race of officer victims from a slightly different angle. It reveals their fatality rates, rather than their duty status, according to shooting type. The table, while based on small numbers, shows that a smaller percentage of the black officers who are shot are fatally injured (14%) than is true of white officers (20%). The percentage of fatalities for black officers is lower regardless of whether the perpetrator is a civilian, the officer himself, or another officer. When the perpetrator is a civilian, white officers are five times as likely to survive as they are to be killed (rates of 1.0 versus 0.2), but black officers are ten times as likely to survive as they are to die (rates of 3.0 versus 0.3).

Combining officers of all races, a relatively high fatality rate (26%) is associated with self-inflicted shootings, the result of the inclusion of officer suicides among these incidents. If suicides are excluded, only 10% of the officers who shot themselves died. This low rate was anticipated because accidental shootings normally involve a single, unaimed shot. Officers shot by civilians stand a better chance of survival (86% live) than civilians shot by police (only 74% live). This difference is probably due to differences in the number of shots fired, caliber of weapons and type of ammunition used, marksmanship of the shooters and defensive tactics employed by the victims.

Shootings of civilians by police and shootings of police by civilians

TABLE 6

POLICE SHOT IN CHICAGO, 1974-1978: SHOOTING TYPE BY RACE AND INJURY OF OFFICER VICTIMS

SHOOTING TYPE		RACE OF OFFICER VICTIMS							
		White		Black		Hispanic		TOTAL	
(1) By Civilian	*Total*	#= 64		39		2		105	
		Rate[a] 1.2		3.4		1.7		1.6	
	Wounded-	W[b]	K[c]	W	K	W	K	W	K
	Killed	54	10	35	4	1	1	90	15
	breakdown	1.0	0.2	3.0	0.3	0.8	0.8	1.4	0.2
	% W & K =	84%	16%	90%	10%	50%	50%	86%	14%
(2) Self-Inflicted	*Total*	37		13		0		50	
		0.7		1.1		—		0.8	
	Wounded-	W	K	W	K	W	K	W	K
	Killed	27	10	10	3	0	0	37	13
	breakdown	0.5	0.2	0.9	0.3	—	—	0.6	0.2
		73%	27%	77%	23%	—	—	74%	26%
(3) By Other Officers	*Total*	10		6		1		17	
		0.2		0.5		0.8		0.3	
	Wounded-	W	K	W	K	W	K	W	K
	Killed	8	2	5	1	1	0	14	3
	breakdown	0.2	0.04	0.4	0.1	0.8	—	0.2	0.1
		80%	20%	83%	17%	100%	—	82%	18%
TOTAL	*Total*	111		58		3		172[d]	
		2.1		5.0		2.5		2.6	
	Wounded-	W	K	W	K	W	K	W	K
	Killed	89	22	50	8	2	1	141	31
	breakdown	1.7	0.4	4.3	0.7	1.7	0.8	2.1	0.5
		90%	20%	96%	14%	67%	33%	82%	18%

[a] All rates = average annual number of officers shot by civilians per 1,000 officers of the indicated race on the Chicago police force.
[b] "W" = wounded.
[c] "K" = killed.
[d] Not ascertained = 15.

are similar in the patterns which emerge when considering the races of both the civilians and officers involved in shooting incidents. In part I of this article, we indicated that shootings of civilians by police are intraracial events more often than might be expected. This is true to an even greater extent for shootings of police by civilians, as Table 7 shows.

Just as black officers and civilians are overrepresented (for the various reasons stated) in shootings of civilians by police, Table 7 shows that black officers are nine times more likely to be shot by black civilians than white officers are to be shot by white civilians (rates of 2.7 versus 0.3). Further, black officers are five times more likely to be shot by black civilians than are white officers (rates of 2.7 versus 0.6). Conversely, black officers are far less likely to be shot by white civilians than are their white colleagues (rates of 0.0 versus 0.3). Indeed, over the five

TABLE 7

INCIDENTS OF POLICE SHOT BY CIVILIANS IN CHICAGO, 1974-1978: OFFICER RACE BY CIVILIAN RACE

RACE OF CIVILIAN SHOOTERS		RACE OF OFFICER VICTIMS			
		White	Black	Hispanic	Total
White	Number	15	0	0	15
	Rate[a]	0.3	—	—	0.2
Black	Number	34	31	0	65
	Rate	0.6	2.7	—	1.0
Hispanic	Number	9	1	2	12
	Rate	0.2	0.1	1.7	0.2
TOTAL	Number	58	32	2	92[b]
	Rate	1.1	2.8	1.7	1.4

[a] All rates = average annual number of officers shot per 1,000 officers of the indicated race on the police force.

[b] Not ascertained = 6 incidents.

years studied, white civilians shot fifteen white officers, but not a single black or Hispanic officer.[12] Thus, as was the case with police who shot civilians, it may be difficult to explain shootings of police in terms of racial animosity by the shooter towards the victim, although again we caution that our data are insufficient for drawing confident conclusions about racial motivation. This does not mean, of course, that an easing of racial tensions between police and the civilian population would not benefit both police officers and civilians by reducing violent interactions that lead to serious injuries of each. Several avenues for attempting to reduce the number of police-involved shootings in years to come are discussed later in this article.

II. FACTORS ASSOCIATED WITH VARIATIONS IN SHOOTINGS OVER TIME

The analysis in part I and, thus far, in part II of this article has combined the five years of shooting data rather than considered how the number and characteristics of shootings might differ from year to year. It is also important to examine changes over time. Such changes may evidence progress or lack of progress in controlling shootings and may suggest fruitful strategies for controlling shooting frequency.

In part I of this article, dramatic increases and decreases were noted

[12] The fact that no black police officer was shot by a white civilian may be explained by a number of factors, including limited assignment of black officers to white residential areas, fewer white than black civilians who shot officers, the units of assignment of black officers and the low percentage of black officers in the Department.

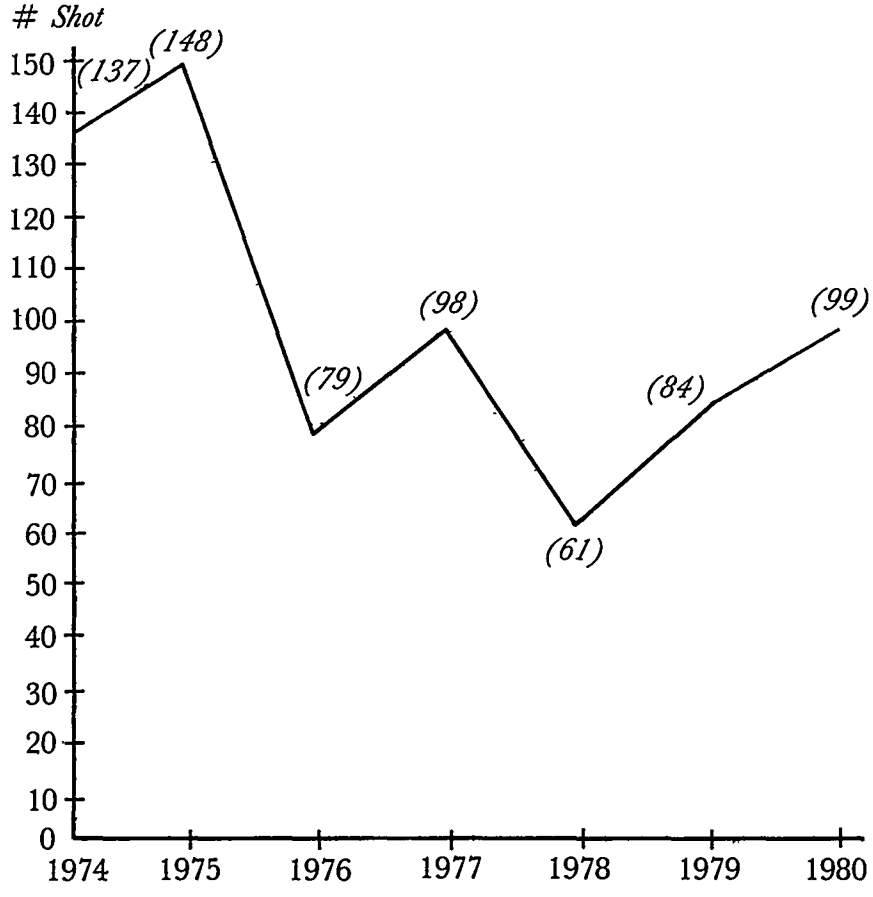
in the number of civilians shot by police from year to year. This section seeks possible explanations for those variations. If such explanations can be found, they may facilitate the efforts of police administrators and others to reduce the frequency of shootings in the future.

The pattern which this section will examine is depicted in Figure 2. The figure adds 1979 and 1980 shootings to the five years, 1974-1978, which are the primary focus of the preceding discussion. (Time constraints precluded us from collecting data on the *characteristics* of the 1979 and 1980 shootings, but we have no reason to believe these shootings differed substantially in kind from shootings in the years studied.)

Some of the annual percentage changes reflected in Figure 2 are substantial: The drop from 148 shooting victims in 1975 to 79 in 1976 is a 47% decrease; shootings in 1978 were down 38% from 1977, but then

FIGURE 2

CIVILIANS SHOT BY POLICE IN CHICAGO, 1974-1980



rose again by 38% percent in 1979. Despite this "roller coaster" pattern (some of which is to be expected when dealing with numbers as small, statistically speaking, as these), an overall decrease of 26% was registered from 1974 to 1980; the endpoints of the series are presented in Figure 2. While some encouragement may be taken from this overall decrease, the increase from 1978 to 1980 represents an upward movement of 62% in the number of civilians shot by police. Even though we lack the requisite data to examine the nature of the shootings in 1979 and 1980, an increase as dramatic as this seems cause for concern.

Several possible explanations for changes in the annual number of shootings will be considered below:

(1) changes in the opportunities for shootings, as indicated by variations over time in the number of forcible felony arrests;
(2) annual differences in the "accuracy" of police gunfire;
(3) annual variations in the number of police officers shot by civilians; and
(4) departmental initiatives relating to training, discipline, weaponry, and operations. In this context, variations in the "types" of shootings which occur from year to year will be examined.

A. FORCIBLE FELONY ARRESTS

As indicated in part I of this article, the theoretical connection between shootings of civilians and forcible felony arrests is that such arrests may give some measure of the number of police-civilian encounters with the potential of ending in shootings. Forcible felony arrests were used for analysis rather than other categories of arrest (*e.g.*, Index Crimes or all offenses) because forcible felonies are offenses that justify shootings under Illinois law.[13] One would expect the number of shootings over time to reflect changes in the number of encounters which present "opportunities" for shootings. To explore this point, we correlated the quarterly numbers of forcible felony arrests and civilian shooting victims from 1974 through mid-1980.[14] The figures used for this correlation are shown in Table 8.

Analysis of the figures in Table 8 shows a positive correlation of .64 between the two events.[15] The +.64 correlation coefficient suggests that

[13] See discussion of Illinois law in part I of this article. Forcible felonies include crimes of personal violence and burglary.

[14] Forcible felony arrest data were not available beyond the second quarter of 1980. Quarters were used instead of years in order to have more points for the correlation analysis.

[15] The range for a correlation is from −1 to +1, with negative values suggesting inverse relationships and positive values suggesting similar movement between two variables. Values close to zero suggest a lack of relationship. The process of deriving quarterly counts for forcible felony arrests was unexpectedly complicated. The Police Department was not able to supply records of arrests by months or quarters—only by its "police periods." Each year

changes in the frequency of shootings are only partially the result of changes in the opportunity structure as indicated by the frequency of forcible felony arrests. Accordingly, other explanations must be sought for variations in shootings over time. Another way to put this is that the number of persons arrested for forcible felonies may not be a sufficient measure of the population at risk of being shot by police. This is not to deny that most of the shootings in our data set are out-growths of forcible felonies. Rather, the correlation suggests that the total number of civilians shot over time is not simply a function of the frequency with which forcible felony arrests occur.

Examining the annual changes in shootings and forcible felony arrests from 1974 through 1979 may help illustrate the association between these two events in a somewhat less technical way. Table 9 shows these data. The table shows a continual decrease in the number of forcible felony arrests every year until 1979, when such arrests were up slightly. (The continual decrease in arrests could be the result of population shifts from the city to the suburbs. Unfortunately, we were unable to obtain annual population estimates for the city.) Against this clear downward trend is the up-and-down pattern of shootings. If variations in opportunities, as indicated by the frequency of arrests for serious crimes, were the key explanation for variations in the number of police shootings, a clear downward trend would be evident in the number of civilians shot each year. Yet shootings were up in 1975 and 1977 despite decreases in arrests. The parallel movement of shootings and arrests in 1976, 1978 and 1979 is made much less significant than it might other-

contains 13 police periods, which are 28 days long and have an identical number of weekends and weekdays. These periods are used by many police departments for research purposes so that comparable units of time will be available for the analysis of crime and other events. We elected to extrapolate quarterly arrest counts from these figures for police periods. We discovered, however, that twice during the seven year period for which we ran the correlation the Department let a week pass between the end of one year's 13th period and the beginning of the following year's first period. This is done, apparently, so that the first police period of a year will always start near the beginning of that calendar year. To accomplish this result, however, adjustments in the police period calendar do not have to be made nearly as often as the Department makes adjustments. It would take many years for the first police period to shift so much that it no longer fell in January. The adverse consequence of frequent adjustments is exemplified by our attempt to estimate the number of forcible felony arrests: two weeks of arrests are missing from the compilations made by the Department. This is not a manipulation of arrest statistics for cosmetic purposes, because calendar year arrest totals are maintained and are available from the Department, but the Department's practice with respect to police period arrest data does not seem ideally suited to its ostensible research goals.

TABLE 8

DISTRIBUTION OF CIVILIANS SHOT BY POLICE & FORCIBLE FELONY ARRESTS IN CHICAGO, BY QUARTER, 1974–MID-1980

YEAR AND QUARTER		# OF CIVILIANS SHOT BY POLICE[a]	# OF FORCIBLE FELONY ARRESTS[b]	SHOOTINGS PER 1,000 F.F. ARRESTS
1974	1	23	5,966	3.86
	2	27	6,064	4.45
	3	37	6,138	6.03
	4	50	5,650	8.84
1975	1	42	6,763	6.21
	2	40	6,531	6.12
	3	36	5,357	6.72
	4	30	5,965	5.03
1976	1	21	5,905	3.56
	2	23	5,594	4.11
	3	18	5,650	3.19
	4	17	4,896	3.47
1977	1	24	4,639	5.17
	2	27	4,823	5.60
	3	23	5,053	4.55
	4	24	4,352	5.51
1978	1	17	4,354	3.90
	2	10	4,711	2.12
	3	21	4,744	4.42
	4	13	4,496	2.89
1979	1	21	4,243	4.95
	2	24	4,677	5.13
	3	18	4,919	3.66
	4	21	4,824	4.35
1980	1	16	4,564	3.51
	2	29	4,886	5.94

($r = +.64$; $r^2 = .41$)

[a] These are the total numbers of civilians shot by police, including accidental events. While accidents are sometimes not related to criminal activity, the data display a fairly consistent percentage of accidental shootings (approximately 10%) from year to year.

[b] Estimated figures.

TABLE 9

ANNUAL NUMBER OF CIVILIANS SHOT BY POLICE AND FORCIBLE FELONY ARRESTS IN CHICAGO, 1974-1979

YEAR	# OF CIVILIANS SHOT	% CHANGE FROM PRIOR YR	# FORCIBLE FELONY ARRESTS	% CHANGE FROM PRIOR YR
1974	137	—	25,860	—
1975	148	+ 8%	25,544	− 1%
1976	79	−47%	22,236	−13%
1977	98	+24%	18,980	−15%
1978	61	−38%	18,193	− 4%
1979	84	+38%	18,663	+ 3%
TOTAL	607	−39%[a]	129,476	−28%[a]

[a] Change from 1974 to 1979.

wise be because of the 1975 and 1977 patterns.[16] Even in the years with parallel movement, the percentage change in shootings was considerably different from the percentage change in arrests.

Thus, it seems that the frequency of forcible felony arrests is only one among many possible explanations for the frequency of police shootings of civilians. Another explanation may be changes in the accuracy of police gunfire from year to year.

B. ACCURACY OF SHOTS FIRED BY POLICE

Data compiled but previously unreleased by the Chicago Police Department[17] show the number of incidents in which Chicago police officers fired shots at criminal suspects, regardless of whether the intended victims were struck by the bullets. Unfortunately, these data are available only for three years, 1975-1977. But even this short time span proves informative. Comparison of the Department's "shots fired" data with our data on the number of incidents in which civilians were shot by police produces what might be called an "incident hit rate."[18] This rate

[16] The pattern of the first half of 1980 conforms to those of 1975 and 1977. That is, comparison of the first two quarters of 1980 (shown in Table 8) with the last two quarters of 1979 reveals that, in the first half of 1980, forcible felony arrests were down by 3% but shootings of civilians were up by 15%.

[17] An untitled statistical report compiled in 1978 at the direction of Acting Superintendent Michael Spiotto was the source of these data (hereinafter cited as SPIOTTO REPORT).

[18] This "hit rate" does not precisely address the question of accuracy of firing, but indi-

TABLE 10

INCIDENTS OF SHOTS FIRED BY POLICE AND OF CIVILIANS STRUCK BY POLICE BULLETS IN CHICAGO, 1975-1977

YEAR	# OF SHOTS-FIRED INCIDENTS	# OF INCIDENTS IN WHICH CIVILIANS WERE SHOT	% OF INCIDENTS RESULTING IN "HITS"
1975	482	138	28.6%
1976	339	75	22.1%
1977	324	95	29.3%
TOTAL	1,145	308	26.9%

reflects the percentage of *incidents* reportedly involving shooting in which one or more civilians were struck by police bullets. Table 10 shows the results for the three years. The table shows a lower hit rate in 1976 than appears in 1975 or 1977. We are uncertain why police gunfire in 1976 was less likely than in the preceding or subsequent years to strike civilians. One possible reason is that slightly fewer shots were fired per incident in 1976 than in other years, as Table 11 shows.

According to Table 11, in 1976 an average of 2.7 bullets were fired per shooting incident, while a slightly higher average prevailed in 1975 and 1977. This difference is so slight, however, that it is not much of an explanation for a drop in the hit rate in 1976. Table 11 makes clear, however, that shooting accuracy was down in 1976, assuming that officers were trying equally hard in all three years to strike civilians at whom they fired. In 1976, only 11.3 bullets of every 100 bullets fired at civilians hit their targets. The percentage of bullets that hit civilians in 1975 was 14.7, and in 1977 it was 16.6. For the three years combined, an average of 14.3 of every 100 bullets fired struck someone. These data suggest that an officer's ability to strike a civilian at whom he fires probably is the result of factors other than aim (*e.g.*, number of shots fired, shooting type, distance between shooter and opponent, etc.).[19] In addition, we may note in passing that whether an officer *kills* a civilian at whom he shoots would seem to be more a matter of chance than of sharpshooting; the marksmanship required for sharpshooting seems to be lacking since 85.7% of all shots fired at civilians do not make contact.

cates how many of the encounters in which police fired bullets at civilians produced gunshot wounds. To examine accuracy more directly, one would need to compare the number of *bullets* fired at civilians with the number of bullets that struck civilians. This comparison is made later in the text.

[19] An officer is likely to fire more shots the closer and more dangerous his opponent is.

TABLE 11

HIT RATE OF BULLETS FIRED BY POLICE IN CHICAGO, 1975-1977

YEAR	# OF BULLETS FIRED	# OF BULLETS WHICH STRUCK	% RESULTING IN HITS	AVERAGE # BULLETS FIRED/INC.[a]
1975	1,481	217	14.7%	3.1
1976	918	104	11.3%	2.7
1977	959	159	16.6%	3.0
TOTAL	3,358	480	14.3%	2.9

[a] In computing the average annual number of bullets fired per incident, the incident count is taken from Table 10.

This does not necessarily mean that officers are incompetent or poorly trained in the use of their weapons. Rather, it may simply indicate that the average shooting situation does not permit precise or accurate aiming.[20]

Another possible explanation for the low incident hit rate in 1976 is that police officers, cognizant of the more deadly capacity of their newly acquired "hollow point" ammunition—and of strong community objections to its use—may have made greater use of warning shots in the several months after the ammunition was furnished. Data compiled by the Police Department, however, tend to refute this hypothesis. They do indicate a slight, possibly random increase in 1976 in the percentage of shots fired as warnings (21% in 1976 compared to 18% in 1975). But a jump of 27% is reported for 1977, when the hit rate improved and, consequently, one would have anticipated a *lower* percentage of warning shots.[21] It is possible, however, that reports of warning shots are not particularly accurate. It is possible that officers were criticized by superiors for poor marksmanship in 1976 and that the officers responded in 1977 partly by improving their accuracy and partly by reporting some of their misses as warning shots.

Yet another explanation for the lower hit rate in 1976 may be found if officers fired at a proportionally higher number of fleeing suspects that year, suspects whose motions made them harder to hit. But again the Department's research seems to point in the opposite direction. In 1975, 40% of all officers who fired their weapons aimed them at

[20] These data, along with empirical findings concerning New York and other cities, serve to debunk the Hollywood-generated myth of the police officer who can shoot accurately enough to "wing" rather than risk killing a fleeing suspect. *See, e.g.*, Fyfe, *supra* note 5, at 129.

[21] *See* SPIOTTO REPORT, *supra* note 17, at 18.

fleeing suspects. The following year, 38% fired at fleeing suspects. While this decrease is admittedly slight, one might have expected a sizeable *increase* in order to explain the lower hit rate. By contrast, 1977 seems consistent with this expectation, for the hit rate increased and the percentage of officers firing at fleeing suspects decreased (to 33%). The inconsistent pattern created over these three years leaves us unable to explain variations in the hit rate.[22]

We agree with other researchers who have argued that the decision to pull the trigger is a more critical subject of inquiry than the often fortuitous result that a person is struck.[23] Future research, to the extent possible, should examine the characteristics of all "shots-fired" incidents, not just the more limited set of events that we have studied. By considering this broader set of events, one can avoid being misled about the extent of police gun use. One might assume, for example, that a year with more shooting victims would be a year with more shots-fired incidents and that fewer victims would signal a reduction in the number of incidents with shots fired. But Tables 10 and 11 show that, in 1977, the number of incidents with civilian shooting victims increased by 27% (from 75 to 95) despite an actual *decrease* of more than 4% in the number of situations when police fired their weapons. Assuming police faithfully reported discharging their guns, what appears to have been genuine progress in 1977 (a reduction in police gun use) was hidden by the possibly fortuitous result that police gunfire seemed to be more accurate that year. Put more negatively, if the "heat" of community criticism was off in 1976, it may have been as much the result of a slippage in marksmanship as it was the product of willful restraint by police officers.

In sum, the relatively small set of data which is available on all shots fired may help explain the drastic reduction in shootings of civilians in 1976 and the subsequent climb in 1977. These data suggest, more generally, that "shots-fired" information is critical in any effort to explain variations in the number of persons struck by police bullets.[24]

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[22] Despite our uncertainty about why the hit rate was lower in 1976, the 1976 rate may help explain the 47% decrease in the number of civilian shooting victims in that year. If the 28.6 hit rate for 1975 had prevailed in 1976 (instead of 75 incidents with civilian shooting victims in 1976) there would have been 97 incidents, still a substantial decrease from the preceding year but not as substantial. Had that been the case, there would have been a slight decrease in the number of incidents with civilians shot by police in *1977*, instead of the actual increase reported earlier. Had there been such a decrease, it would have paralleled the decrease from 1976 to 1977 in the number of forcible felony arrests. So it is possible that variations in the hit rate mask an otherwise stronger correlation between serious arrest encounters and police decisions to pull the trigger.

[23] *See, e.g.*, M. MEYER, REPORT TO THE LOS ANGELES BOARD OF POLICE COMMISSIONERS ON POLICE USE OF DEADLY FORCE IN LOS ANGELES: OFFICER-INVOLVED SHOOTINGS, PART IV (July, 1980); Fyfe, *supra* note 5.

[24] The importance of studying all shots fired by police at civilians may be underlined by

C. POLICE SHOT BY CIVILIANS

At the outset of this research, we were operating on the assumption that information on shootings of police officers by civilians was critical for an understanding of shootings of civilians. Our premise, formed after literature review, was that the number of shootings of police officers by civilians provided a key index of the level of danger perceived by police and, accordingly, would be positively correlated with the number of civilians shot by police. The data do not seem to support this notion.

The number of police officers shot by civilians during the five principal study years remained remarkably constant, at least after 1974: 31 officers were shot by civilians victims in 1974, and 19, 18, 20, and 20 were shot in the subsequent four years, respectively. A dramatic illustration that shootings of police by civilians are only one among many indices of police risk appears in the data for 1976, which show that 18 officers were shot by civilians and that 17 officers suffered accidental self-inflicted wounds. If shootings by fellow officers that year are added, police officers in 1976 actually were placed in greater jeopardy by themselves and their colleagues than by armed criminal suspects.[25]

We tested the correlation between the relatively constant number of officers shot by civilians and the widely fluctuating number of civilians shot by police and found, not surprisingly, virtually no relationship, positive or negative. Table 12 indicates the numbers used for the correlation. These numbers resulted in a correlation coefficient of +.15, which suggests that the frequency with which civilians are shot by police in a given year does not vary with the number of officers shot by civilians.[26] Thus, shootings of police by civilians do not seem to help explain changes over time in the number of civilians shot by police.[27] Neither, then, does it appear that police shooting restraint is associated with changes in the degree of danger to police from civilian gunfire.

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considering the impression one might get of relative shooting levels in Chicago and Los Angeles with less extensive information. From 1974 through 1978, Chicago police fired at an estimated 2,876 individuals, striking 523, killing 132 of them. Los Angeles police during the same period fired at 611 persons, striking 377, killing 139 of them. MEYER, *supra* note 23, at 12, 15, 31. An examination of only "on-target" shots would be misleading as to the relative amount of police gunfire in the two cities; a study which, like many studies, looked only at levels of *fatal* shootings would be extremely misleading to the uncautious reader.

25 For some reason unknown to us, 1976 was an aberrant year for accidental self-inflicted police shootings, containing 43% of all such incidents that occurred during the five year study period. The distribution of accidental self-inflicted shootings by police was as follows: 1974-10; 1975-7; 1976-17; 1977-2; 1978-4 (Total = 40).

26 A somewhat more sophisticated analysis could examine whether shootings of one type (either of or by police) may be a delayed reaction to the other type, as opposed to an immediate reaction; that possibility appears to us to be remote.

27 While neither type of shooting is associated with the other on a systematic basis, for an individual officer the risk of being shot may affect his likelihood of shooting a civilian.

TABLE 12

CIVILIANS SHOT BY POLICE AND POLICE SHOT BY CIVILIANS IN CHICAGO, 1974-1978, PER QUARTER

YEAR AND QUARTER		CIVILIANS SHOT BY POLICE	POLICE SHOT BY CIVILIANS
1974	1	23	7
	2	27	12
	3	37	4
	4	50	8
1975	1	42	6
	2	40	6
	3	36	4
	4	30	3
1976	1	21	2
	2	23	5
	3	18	7
	4	17	4
1977	1	24	5
	2	27	3
	3	23	4
	4	24	8
1978	1	17	4
	2	10	7
	3	21	5
	4	13	4
TOTAL		523	108

D. DEPARTMENTAL INITIATIVES

Other researchers have demonstrated that restrictions in written deadly force policies have been followed by a marked, beneficial impact on the frequency of police-involved shootings.[28] We could not study the effect of such policy change because the Chicago Police Department did not change its written deadly force policy during the years studied. To the best of our knowledge, only two key initiatives were undertaken by the Department during these years other than routine training on departmental policy and tactics, which were explicitly intended to control shootings: (1) The creation, in the fall of 1974, of the Office of Professional Standards; and (2) in-service classroom training in late 1977 and

[28] *See, e.g.*, C. MILTON, POLICE USE OF DEADLY FORCE (1977); Fyfe, *supra* note 5.

early 1978 on departmental deadly force policy, shooting review procedures, and techniques for handling firearms. To the limited extent that our data permit, we will attempt to identify the impact of these initiatives and other departmental variables on the number and nature of police shootings of civilians.

(1) Office of Professional Standards

The Office of Professional Standards (O.P.S.) was established in late 1974 in response to a protracted public debate about police brutality in Chicago. The agency, under the authority of the Superintendent of Police, was given jurisdiction over police use of excessive force. O.P.S. investigates the use of *non*-deadly force only when someone (a civilian victim or witness, police officer, O.P.S. staff) complains that the force may have been excessive. However, all police gunfire that hits someone (civilian or officer) is investigated by the agency, whether or not there is any initial doubt as to the justifiability of the shooting. Incidents in which police officers are shot by civilians are not automatically investigated by O.P.S. unless an officer also shoots someone during the same encounter. The agency's staff[29] gathers evidence about shootings from the involved officers, civilians, and witnesses and makes recommendations to the Superintendent as to whether a shooting was justified or not under applicable policy and rules. The O.P.S. is staffed by civilians, unlike its predecessor agency, the Internal Affairs Division of the Department. The I.A.D. continues in operation, but its jurisdiction encompasses police conduct other than that involving use of force.

The ideal way to analyze the impact on shootings by police of the establishment of O.P.S. would be to compare the number and types of shootings that occurred over reasonably long periods of time prior to and after the creation of the agency. Unfortunately, we lack the requisite data prior to the creation of O.P.S. The office was founded in 1974, and our data set commences in that year. Nevertheless, we note from Figure 2, above, that shootings of civilians by police were at the highest point in any of the seven study years during 1975, the first full year of O.P.S.' operation. One might argue that it took some time for O.P.S. to establish a deterrent capability since shootings did fall off rather dramatically a year later. We are not able to offer more than speculation on this point.

Since shooting frequencies before the creation of O.P.S. cannot be examined, the best alternative is to measure the correlation over time between the number of O.P.S. decisions (explained below) and the

[29] The number of investigators has grown from 33 in 1975 to 63 in 1981. Conversation with O.P.S. Co-Administrator James Rosas (Jan. 12, 1981).

number of shootings of civilians. The correlation we have prepared is between decisions of O.P.S. adverse to the officers under investigation and shootings of civilians per year. The adverse decisions concern *all* O.P.S. cases reported, not just those in shooting cases. (Many shooting dispositions are not publicly reported by the Department in its annual statistical reports. The only shootings included in the reported O.P.S. data used for the correlation are those where O.P.S. staff had some reason at the outset of an investigation to suspect officer misconduct, and so converted the case file number to a "C.R." number. Cases so converted were disposed of, like all *non*-deadly force cases, not with a finding of "justified" or "unjustified," but with one of the following dispositions: "unfounded," "exonerated," "not sustained," or "sustained." Only the last disposition is adverse to the police officer.)[30]

We have chosen to correlate shootings with O.P.S. decisions in cases that primarily involve use of *non*-deadly force because insufficient data are available on O.P.S. shooting dispositions. Since O.P.S. was not created until the latter part of 1974, very few determinations were made in shooting cases during that year. Our data do contain O.P.S. shooting dispositions for 1975-1977, but 1978 is problematic. Most of the 1978 shootings were still under investigation at the time we completed data collection from O.P.S. files in 1979, and we were subsequently not able to return to the files and collect the 1978 data. With only three full years of O.P.S. findings ascertainable, insufficient points are available to determine a correlation with shootings.

Our justification for correlating shootings with O.P.S. decisions in *non*-deadly force (and a smattering of deadly force) cases is that disciplinary decisions pertaining to use of *non*-deadly force could have a "ripple" deterrent effect on police shootings. If police-administered beatings are severely punished, officers may reasonably assume that they will also be harshly dealt with for improperly shooting people. On the other hand, official tolerance of corporal punishment by officers may lead police to think that they can administer capital punishment with impunity as well.

The figures tested for degree of correlation appear in columns "A" and "B" of Table 13. The 1974 data that are included in this correlation represent the combined I.A.D. and O.P.S. adverse findings in connection with use of force. I.A.D. decisions were included for 1974 because that agency had responsibility for excessive force cases for most of that year. In each of the following years, the dispositions are solely those of the O.P.S. The table makes clear that the number of disciplinary actions recommended jumped dramatically as soon as the O.P.S.

30 The several O.P.S. dispositions are defined in connection with Table 14 *supra*.

was established. The increase from 32 in 1974 to 122 in 1975 represents a 281% jump in the number of adverse dispositions. Nevertheless, as indicated above, shootings were at a seven-year high in 1975. The correlation coefficient obtained for the figures in columns "A" and "B" of Table 13 (*i.e.*, correlation between the number of civilians shot by police and the number of findings of rule or policy violations) was −.64. The fact that the coefficient has a negative value suggests the existence of an *inverse* relationship between shootings and adverse decisions on excessive force complaints. The correlation is a moderately strong one. However, it was not possible for us to determine which event may have helped cause the other, *i.e.*, whether changes in O.P.S. decisions affected the frequency of shootings or changes in shootings affected the frequency of O.P.S. adverse decisions. Nor could we determine whether the relationship might be a spurious one, with both shooting and adverse decisions responding to some other factor or factors. In any case, if either event is "causal," it is only one factor among several that may affect the fre-

TABLE 13

CIVILIANS SHOT BY POLICE IN CHICAGO & O.P.S. DISPOSITIONS OF EXCESSIVE FORCE INVESTIGATIONS, 1974-1979

	"A"	DISPOSITIONS		
YEAR	# OF CIVILIANS SHOT	"B" ADVERSE[a]	FOR OFFICER[b]	TOTAL
1974	137	32[c]	—	32[c]
1975	148	122[d] (9%)	1,197	1,319
1976	79	123 (7%)	1,778	1,901
1977	98	174 (8%)	2,155	2,329
1978	61	166 (7%)	2,259	2,425
1979	84	154 (6%)	2,411	2,625
TOTAL	607	771 (7%)	9,860	10,631

Source: C.P.D., STATISTICAL SUMMARY (1974-1979).

[a] Adverse = a violation of departmental rule or policy was found in connection with officer's use of force.

[b] For Officer = no violation of departmental rule or policy was found in connection with officer's use of force.

[c] Includes both I.A.D. and O.P.S. decisions on excessive force complaints. I.A.D. statistics are reported for the period during 1974 (and holdover cases in 1975) when I.A.D. handled charges of excessive force. Thereafter, all numbers are for O.P.S. A portion of the complaints registered with O.P.S. are routed to the I.A.D. for investigation, since they fall within the jurisdiction which I.A.D. was given after the creation of O.P.S. The only cases shown on this table, however, are those relating to O.P.S.' subject matter jurisdiction—use of force.

[d] This number includes 15 holdover I.A.D. cases from 1974 and 107 O.P.S. cases.

quency of the other event. We may hypothesize, based on the −.64 correlation coefficient, that, as adverse O.P.S. findings increase, shootings decrease and that, as such findings decrease, shootings increase. To the extent that this hypothesis is correct, O.P.S. excessive force determinations may help control police use of deadly force.

TABLE 14

O.P.S. DISPOSITIONS OF SHOOTINGS OF CIVILIANS AND POLICE BY CHICAGO POLICE, 1975-1977

DISPOSITION	YEAR			
	1975	1976	1977	Total
Adverse Findings:				
Unjustified[a]	1	2	3	6
Sustained[b]	8	7	2	17
Subtotal	9	9	5	23
Findings For Officers:				
Justified[c]	116	62	50	228
Not Sustained[d]	3	4	2	9
Exonerated[e]	14	3	23	40
Unfounded[f]	1	1	1	3
Accidental	0	6	6	12
Subtotal	134	76	82	292
TOTAL	143	85	87	315[g]

[a] Finding of rule or policy violation in a case where no misconduct was initially suspected and hence the case was not converted to a "C.R." file number.

[b] Allegation of misconduct was supported by sufficient evidence to justify disciplinary action. Note: A considerable percentage of these findings was premised on rule or policy violations during shootings deemed justified (*e.g.*, use of unauthorized ammunition).

[c] Finding that shooting was within policy and rules in a case where O.P.S. had no reason at the outset to suspect misconduct and hence did not convert the investigation to a "C.R." file.

[d] Allegation supported by insufficient evidence, which could not be used to prove or disprove the allegation.

[e] Incident occurred, but action taken by officer(s) was deemed lawful, reasonable and proper.

[f] Complaint was not based on facts as shown by the investigation, or reported incident did not occur.

[g] This total disagrees with total number of civilians shot in these three years (325) because the 315 figure includes some findings in cases where officers shot themselves or fellow officers and excludes several dispositions of shootings of civilians where the result was not ascertainable.

The O.P.S. decisions specifically dealing with shooting investigations are indicated in Table 14. The number of adverse findings ascer-

tained (total of 23, or 7% of all ascertained shooting dispositions for the three years) is simply too small to work with for purposes of correlations. Thus, we cannot measure the relationship, if any, between rule and policy violations found by O.P.S. in shooting cases, on the one hand, and shootings of civilians, on the other hand. Nevertheless, we would speculate that well-publicized punishments of police officers for improper conduct during shootings could have a beneficial deterrent effect on police shooting activity. This speculation could be tested in the future by analysis of the frequency of shootings before and after well-publicized disciplinary measures taken by the Department against members for abuses of deadly force.[31]

(2) In-Service Deadly Force Training

The other key initiative aimed at reduction of shootings by police that was taken during our study period was a one-day, in-service, classroom training program on the use of deadly force. This program was started in late 1977 and extended well into 1978. It was prompted by a variety of factors, principally community outcry after a series of late 1977 shootings of teenagers, most of whom were black and were engaged in relatively minor misconduct or were the victims of unintentional shootings.

For present purposes, the most important thing to note about the content of the training[32] is the key message which the Department attempted to convey to its members. Essentially, that message was that officers should, in accordance with departmental policy, shoot only as a last resort, to the extent possible without unduly jeopardizing themselves. At roll call training, which supplemented the classroom instruction, officers were explicitly told to exercise greater restraint in shooting fleeing burglary suspects, a type of shooting for which the Department was receiving increasing public criticism.

A difficulty arises in testing the impact of this training. The difficulty is analagous to the obstacle we encountered in attempting to meas-

[31] July 22, 1980, may provide an appropriate focal point for an interrupted time series analysis. On this day, the Cook County State's Attorney and the Chicago Police Superintendent, in a joint press conference, announced murder indictments against three white Chicago police officers for the alleged beating death of a black man after an altercation on a subway over the black man's reported refusal to obey the officers' orders to stop smoking. (In December 1981, after a bench trial, one officer was acquitted of all charges and the other two were found guilty of involuntary manslaughter and official misconduct.) Just hours after this press conference, the Police Superintendent summoned the press again to announce suspension and the filing of Police Board charges against another officer for allegedly accepting a $300 bribe to tamper with a pending case. *See* Chicago Tribune, July 23, 1980, § 1, at 1, col. 2, and § 4 at 1, col. 3.

[32] For details of the training program, see W. GELLER & K. KARALES, SPLIT-SECOND DECISIONS: SHOOTINGS OF & BY CHICAGO POLICE 244-47 (1981).

ure the effect of O.P.S. decisions on shootings. Above, we lacked sufficient data *prior* to the creation of O.P.S., here we lack sufficient data *after* the training was administered to conduct an adequate analysis of impact. We know the number of civilians shot by police in 1978, 1979 and 1980, but we know the distribution of shooting *types* only from 1974 through 1978.

Within these limitations, some speculations may still be possible. Considering only the number of civilians shot annually helps us to assess the Police Department's suggestion[33] that the 1977-1978 training had some effect in reducing the number of shootings in 1978. (A 38% reduction was experienced from 98 civilians shot in 1977 to 61 shot in 1978.) Whatever beneficial effect this training may have had was short-lived. As noted earlier, after the 1978 decrease the number of civilians shot by police has climbed steadily.

The annual distribution of shooting "types" provides another basis for speculation about the effects of the re-training on shootings. Table 15 depicts the types for the years 1974-1978, the only years for which such data were available. This table shows that in 1978 shootings declined in nearly every category, except for Type 3 which had only one shooting. A difficulty with simply crediting such reductions to the in-service training is that an even more dramatic, across-the-board pattern of reductions occurred in 1976, without the prompting, so far as we know, of any special departmental initiative.[34]

Another way to examine the possible impact of the training program is to attempt to focus on the kinds of shootings that the training especially discouraged: shootings that were not a last resort, shootings of fleeing burglary suspects and shootings by off-duty officers who had

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[33] The Superintendent made the following points in his January 1979 report to the Chicago Police Board:

> Deadly force statistics include all firearms uses by police officers when injury results, including firing at criminals, accidentally self-inflicted wounds, and suicides. In 1978 the Chicago Police Department recorded a 22% decrease in these incidents from 1977, a 51% decrease from the number recorded in 1970. The 1978 experience represents the lowest number of these incidents since 1969. This decrease can be attributed to a combination of factors; however, the marked decrease can be attributed to two prime factors: (1) the roll call training conducted by the command members of the Department on the subject of deadly force and (2) the ongoing deadly force in-service seminar which is being required for all sworn members of the Department. This full-day in-service course which has been reported to the Board since its inception is an intensive review of applicable state law, Department General Orders, civil and criminal liability and a discussion of past incidents to surface and improve the attitudinal aspects for the participating officers.

REPORT OF THE SUPERINTENDENT TO THE POLICE BOARD OF CHICAGO 6 (Jan. 1979).

[34] One special patrol program which operated during 1975 was not repeated in 1976, however, and this may help explain the 1976 decrease. The program was "Operation Saturation," an intensive patrol and arrest operation on public transit vehicles and other facilities.

TABLE 15

CIVILIANS SHOT BY POLICE IN CHICAGO, 1974-1978: SHOOTING TYPES OVER TIME

SHOOTING TYPE		YEAR					
		1974	1975	1976	1977	1978	Total
(1) Gun use/threat		80	61	41	51	31	264
	Col.%	58%	42%	52%	54%	51%	51%
(2) Other deadly weapon or physical force use/threat		14	26	11	11	10	72
	Col.%	10%	18%	14%	12%	16%	14%
(3) Other deadly weapon possessed without threat		3	6	1	1	1	12
	Col.%	2%	4%	1%	1%	2%	2%
(4) Flight without other resistance		21	25	18	15	10	89
	Col.%	15%	17%	23%	16%	16%	17%
(5) Other reasons for shooting intentionally		1	4	0	2	0	7
	Col.%	1%	3%	—	2%	—	1%
(6) Accidental		10	18	8	10	6	52
	Col.%	7%	12%	10%	11%	10%	10%
(7) Mistaken Identity		2	1	0	1	0	4
	Col.%	2%	1%	—	1%	—	1%
(8) Stray Bullet		6	4	0	4	3	17
	Col.%	4%	3%	—	4%	5%	3%
TOTAL		137	145	79	95	61	517[a]
	Col.%	100%	100%	100%	100%	100%	100%

[a] Not ascertained = 6.

been drinking. The training program discouraged such shootings in the sense that departmental officials indicated to the trainees that the Department would frown on such uses of police weapons. Our data, unfortunately, are not sensitive enough to respond to the question of "last resort." Our inability to do so stems from the failure of the Department's firearms-use report or any other documented part of the review process to inquire routinely about the availability of other means of resolving the situations short of deadly force.[35]

We can, however, address the question of how many fleeing burglary suspects were shot by police before and for a short period after the in-service training. Table 16 presents the number of fleeing burglary suspects shot per year, as well as the rate at which they were shot. The rate represents the number of victims in a year per 1,000 arrests for bur-

[35] Such questions should be included in an expanded firearms use report. This recommendation is made with an awareness that officers may be disinclined to answer such questions and that incentives may need to be created to encourage truthful responses. *See* W. GELLER & K. KARALES, *supra* note 32, at 192-93.

glary in that year. Table 16 shows, with admittedly small numbers, that shootings of fleeing burglary suspects were cut by 50% in 1976, and then declined by one in each of the next three years. Hence, it is difficult to note any clear impact on shootings of these suspects produced by training in 1977 and 1978. Examining the rates of shootings yields much the same result. While burglary arrestees were 2.6 times less likely to be shot by officers in 1978 than in 1975 (rates of 1.3 versus 0.5), the differences in their chances of being shot in 1976, 1977 and 1978 were negligible.

The Department's admonitions[36] to officers to leave their guns home if they were going out drinking may have done some good in 1978, for the number of off-duty officers who shot civilians after the officers reportedly had been socializing in a tavern or other place where liquor was served was cut in 1978. But, as was the case with shootings of fleeing burglary suspects, an even more drastic cut was registered in 1976. The annual distribution of officers who shot civilians following the officers' reported social drinking was as follows: 1974-16; 1975-11; 1976-1; 1977-9; 1978-2 (Total = 39).[37] We do not know whether the 1976 decrease was accompanied by similar special warnings about alcohol-related shootings. If it was, then such warnings may be an effective control strategy for this particular type of off-duty shooting. The preceding analysis of the 1977-1978 training program's possible effects does not rule out the possibility that the training served to *keep* shootings at a low level in 1978 and that, but for the instruction, the upward trend we have seen for 1979 and 1980 would have begun a year earlier.

TABLE 16

CIVILIANS SHOT BY POLICE WHILE FLEEING FROM SUSPECTED BURGLARIES IN CHICAGO, 1974-1978

CIVILIANS SHOT BY POLICE	YEAR					
	1974	1975	1976	1977	1978	Total
Number	11	14	7	6	5	43
Rate[a]	1.0	1.3	0.6	0.6	0.5	—

[a] Rate = number of civilians shot per 1,000 arrests for burglary in the indicated year.

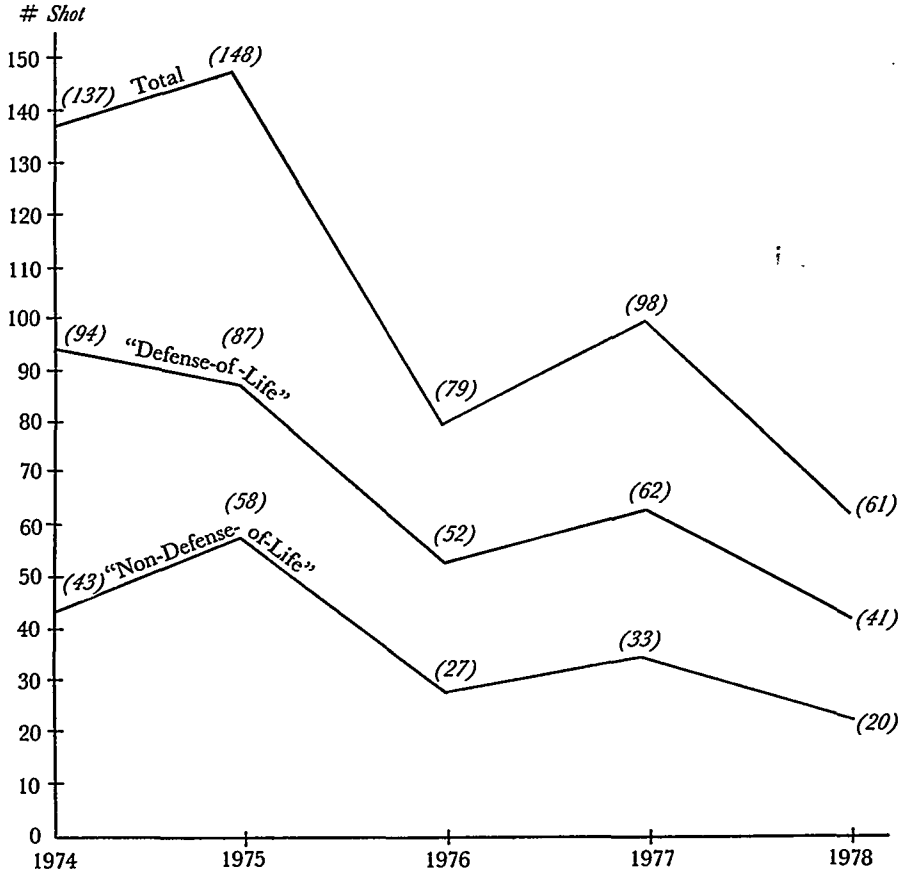
[36] At the January 1978 Police Board meeting, Acting Superintendent Michael Spiotto issued a "call" for police officers to leave their guns home when they went out drinking. Spiotto declined to go so far as to issue a written order to this effect, a step which Superintendent Richard Brzeczek took in December of 1980 with DEPARTMENTAL GENERAL ORDER 80-20. See W. GELLER & K. KARALES, *supra* note 32, at 231 for a copy of the order.

[37] Reporting behavior, as well as our data collection methods, may have operated to undercount the number of officer shooters whose activity just prior to involvement in the shooting was socializing in a tavern/other place where liquor is served.

Table 15 suggests in another way that variations in the number of shootings from 1974 through 1978 were not highly influenced by departmental attempts to control shootings. If the Department *had* been able to mount effective control strategies, the result presumably would be disproportionate reductions in shootings which could be characterized as "non-defense-of-life." The reason for this is that sincerely perceived defense-of-life situations would appear to be relatively unsusceptible to control strategies, while situations perceived to be lower-risk encounters would appear to be highly susceptible to regulation.[38] But the pattern of shootings reflected in Table 15 is inconsistent with this logic. The

FIGURE 3

CIVILIANS SHOT BY POLICE IN CHICAGO, 1974-1978: "DEFENSE-OF-LIFE" AND "NON-DEFENSE-OF-LIFE" SHOOTINGS



[38] Following the New York City Police Department's adoption in 1972 of a restrictive shooting policy which, as enforced, prohibited all but defense-of-life shootings, the Depart-

pattern may be easier to see if shooting types are combined and depicted over time on a graph. Figure 3 does this. It combines shooting types 1 and 2 from Table 15, which include the most serious civilian behaviors—use of guns or other weapons against police officers or others—that reportedly precipitated shootings. This group of shootings is called "defense-of-life" shootings for purposes of this graph. Figure 3 combines into a separate group the remaining six shooting types, which, with minimal possible exceptions, are generally considerably less likely to place the lives of the officer shooters in jeopardy. This group is referred to as "non-defense-of-life" shootings for present purposes.

Figure 3 shows that neither of the reductions in the total number of shootings of civilians (1976 and 1978) was the result of reductions *primarily* in "non-defense-of-life" shootings. In both cases, defense-of-life shootings decreased together with elective shootings. This parallel reduction of both groups of shootings may suggest that fewer opportunities for shootings presented themselves in 1976 and 1978 rather than that police avoided whatever shootings they could avoid.

It is interesting to note, as Figure 3 shows, that the increase from 1974 to 1975 in the total number of civilians shot by police was produced not by an increase in defense-of-life shooting (which actually declined slightly that year) but by a jump in the number of "non-defense-of-life" shootings. A fairly dramatic increase in the number of civilians shot accidentally was registered in 1975, as Table 15 shows.

Calculations based on Table 15 also show, somewhat surprisingly, that in 1976, when shootings nose-dived 47% civilians shot for fleeing represented a larger percentage of total shootings (23% than they did during any other year. As indicated earlier, one might well have expected that a substantial overall decrease of the sort experienced in 1976 would be attained by the virtual elimination of elective shootings of this kind or at least a disproportionate reduction of them. Instead, there was a lesser reduction of "flight" shootings in 1976 (28%) than there was of defense-of-life shootings (a combined decrease of 40% in shooting types 1 and 2).

In sum, it is possible that departmental training in late 1977 and 1978 may have done some short-range good in reducing the total number of shootings of civilians; but it does not seem that specifically targeted shooting types were reduced by that training. Additionally, it appears that, at most other times during the years for which we have data, shootings of civilians by police officers drifted upward and down-

ment experienced a decrease of more than 80% in non-defense-of-life shootings. Fyfe, *Administrative Interventions on Police Shooting Discretion*, 7 J. CRIM. JUST. 313 (1979).

ward, sometimes dramatically, without significantly responding to any departmental shooting control strategies that may have been employed.

(3) Other Departmental Variables

This section has in no way exhausted the departmental factors that may affect the frequency of shootings, nor can it do so. Unlike some research efforts involving other police departments that have been launched to study the impact on shootings of a specific, previously identified departmental control strategy, this research has been primarily exploratory. At the outset, neither the frequency of shootings nor the existence of administrative efforts to reduce shootings was known to us. Aside from the two key initiatives just discussed—the creation of O.P.S. and the in-service training—the Department could not identify any other measures that might have affected the frequency of shootings. Hence, we have searched through departmental documents for factors that could have some impact on shootings. These factors are not all control strategies. Most of those over which the Department had control were not designed with shootings in mind, but they may have the side effect of either increasing or decreasing the frequency of shootings. We have not tried to isolate specific factors and demonstrate a statistical connection between them and shooting rate changes, for the data and analytic techniques necessary for such an undertaking were not available as a result of various constraints. We have suggested, instead, *conceptual* connections between the various factors and shooting frequencies. Identification of some of these departmental variables may prove helpful to future researchers both within and outside the Department.

Programs like "Operation Saturation," a patrol operation noted earlier, could potentially increase the number of shootings by increasing the number of police-civilian encounters.[39] In a similar vein, increased use of court summonses instead of arrests for minor offenses frees officers for more "preventive patrol" and, potentially, for more contacts relating to serious offenses. Moreover, the use of furloughed and off-duty officers under special employment programs to compensate for the Department's reported shortage of personnel[40] can affect the number of police-

[39] According to the Police Department, the program's "heavier and strategic police patrols on Chicago's public transportation system . . . resulted in a 50% decrease in C.T.A. crime during 1975. The unit challenged 127,000 persons regarded as suspicious, made 48,170 arrests for various crimes, and confiscated 1,606 guns." CHICAGO POLICE DEPARTMENT, STATISTICAL SUMMARY 15 (1975).

[40] Despite a reported shortage of 1,000 employees, the total number of sworn personnel indicated by computer printouts supplied for this study by the Department remained remarkably consistent from year to year. These numbers are as follows: 1974—13,203; 1975—13,149; 1976—13,363; 1977—13,443; 1978—13,309; 1979—13,203; 1980—12,730; 1981—

civilian contacts by placing more officers on the streets. In addition, increased use of civilian employees for desk assignments also frees more sworn personnel for patrol. On the other hand, the deployment of unarmed Transit Safety Aides on the public transit system could decrease the number of police-civilian contacts since the Aides are able to handle minor problems that otherwise may be referred to sworn police officers.

Not only the *number* of officers on the streets but the characteristics of these officers may affect shootings. The return to street duty of officers who had been in desk jobs for some time may help explain an increase in the number of accidental shootings, shootings of fleeing suspects and shootings of suspects wielding weapons other than guns. (See Table 15.) More "street wise" officers, arguably, may keep their cool better in such situations and resolve them without resort to deadly force. In addition, the use of off-duty officers and those on furlough for active duty may place on the streets a group of personnel who are more physically and emotionally drained than is normally the case. Such officers might not be as effective as other officers in avoiding shootings.

Just as the placement on the streets of tired officers or officers without current street experience could lead to an increase in shootings, programs which enhance supervision of patrol officers may deter avoidable shootings. One such program, introduced by the Department in late 1975, uses "patrol specialists," experienced police officers who work with recruits during their advanced field training in the districts.[41] Similarly, the appointment of large numbers of temporary or permanent sergeants could reduce shootings through enhanced field supervision of both experienced officers and inexperienced ones. The "supervisory sector concept of supervision," introduced in 1976, also provides additional oversight and evaluation of patrol officers by sergeants. The appointment of large numbers of sergeants also could have an impact on shootings because such appointments would probably reduce the number of patrol officers and, thus, the number of officer-civilian encounters.

Other factors that may affect shooting frequencies by increasing or

12,340. Figures for 1979-1981 were quoted in an interview with Police Superintendent Richard Brzeczek. *Oberman hits police, fire items of budget*, Chicago Sun-Times, Nov. 24, 1980, at 2, col. 1.

41 One announced goal of the patrol specialist program was to "help weed out any recruits who, in the opinion of the patrol specialists, won't be able to stand the stress." Patrick Needham, Dep. Supt., Bureau of Administrative Services, C.P.D., *quoted in* Wattley, *Vet Cops to Test Rookie Fitness*, Chicago Tribune, July 29, 1977 § 3, at 4, col. 6. Then-Superintendent James Rochford, in announcing the completion of training for the patrol specialist job of 238 veteran officers, indicated that this "training was designed to enable them to recognize any psychological difficulty being experienced by probationary officers that might impede their progress toward becoming effective police officers." Rochford indicated that the specialists would meet several nights a week with psychiatrists to discuss questions they may have about the recruits. *Id.*

decreasing opportunities for shootings are variations in the number of calls for service and radio dispatches. Calls for service may provide not only an indirect index of police-civilian contacts, but also a surrogate measure of the degree to which the community wants to involve police in the solution of its daily problems. Dispatches provide an alternative to arrest figures for gauging the frequency of police-civilian contacts, although dispatches would not reflect officer-initiated contacts or encounters that resulted from civlians flagging down police on the streets.

Increases or decreases in the relative accessibility of guns on the streets, as reflected in the number of firearms homicides or gun confiscations in a given time period, may also impact on shooting frequencies. The more guns, the greater the perception of danger officers may have. Such differences in gun availability would probably have to be substantial, however, to have any effect on police shooting behavior.[42]

Finally, changes in the frequency of range firing for sworn personnel may have some impact on their confidence in and competence with their weapons. When the Department made its controversial switch to "hollow point" ammunition in 1975, officers began receiving twice-a-year range practice, instead of the annual practice which had prevailed for some time. Extra instruction in the safe handling of sidearms and shotguns, which may be part of roll call training or in-service programs at the Police Academy, may also have a beneficial impact in reducing shootings, especially accidental ones.

Future research could explore the effect of these and other factors through multivariate analysis and other appropriate statistical techniques. While none of these factors seems as dramatic as a change in a written deadly force policy, they represent the kind of subtle operational, supervisory and training initiatives which, collectively, could set a "tone" that will affect officer shooting discretion.

III. RECOMMENDATIONS—SHOOTING CONTROL STRATEGIES

The object of any control strategy is to limit the frequency of shootings that are avoidable (a considerably larger group of incidents than those which are illegal or beyond departmental policy). Some shootings by and of police simply do not seem avoidable, even with the benefit of hindsight. Still, a great many of the incidents we studied might have been susceptible to nonlethal, safe solutions.[43] The data in this study and in other empirical research suggest that police-involved shootings may be amenable to a variety of control strategies. The data also sug-

[42] *See generally* S. BRILL, FIREARM ABUSE: A RESEARCH AND POLICY REPORT (1977).

[43] For a listing of factors bearing on the avoidability of shootings, see W. GELLER & K. KARALES, *supra* note 32, at 180-81.

gests, however, that no single strategy seems suitable for the reduction of all types of shootings.

The several control strategies set forth in this section are attempts to prevent shootings that are avoidable for any of a variety of reasons.[44] Most of the strategies presented are closely related to a number of key findings, which are summarized briefly now and developed more fully as necessary in the course of presenting specific strategies. Of primary importance is the implication of the typology (depicted in Figure 1 in part I of this article and in Table 15 in this part) that at least a third of all shootings of civilians by police are prompted by civilian conduct that does not immediately jeopardize the lives of responding officers or the public at large. Hence, rules prohibiting certain types of shootings have the potential to save lives without imposing unreasonable[45] risks on police or other innocent persons.

Although rule changes may fill a need with respect to reduction of *intentional* shootings by police, they do not seem well-suited to correcting bad habits (*e.g.*, carrying guns in the cocked position) which have led to a large number of accidental shootings—shootings in which both civilians and police have been the victims. Accordingly, strategies are needed that show promise of controlling both "elective" and unintentional shootings. Rule changes also show little promise of providing officers with the non-lethal tactical skills (*e.g.*, techniques for approaching suspects) that probably could help them avoid *intentionally* shooting or being shot by a number of civilians. Tactical training and training in weapons handling, therefore, seem to be very important control strategies.

But the crime situations where the most tactical training may be required are not necessarily those which are currently given the greatest emphasis in police academies. For example, considerable attention is devoted (admirably) to the non-violent resolution of domestic disputes, but relatively little time is spent on techniques for approaching the scene of a suspected robbery. These training priorities may be premised on the belief, contradicted by our data, that police face greater hazards from quarreling family members than from robbery suspects.

Just as the data suggest that police perceptions of police shootings may be incorrect on the dimension of the relative danger posed by different crime situations, so our analysis, while inadequate to be conclusive, casts some doubt on the belief, widely held in some segments of the community, that racism is responsible for a large proportion of police-

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[44] *See* text accompanying note 50 *infra*.

[45] Value choices are involved in deciding whether the risks are reasonable or not, and we recognize that fair-minded people can reach different conclusions on this point.

involved shootings. While efforts to erase racial tensions between police and the community are obviously desirable for many reasons, it is possible such efforts may not produce a marked reduction in the frequency of police shootings.

The data address another issue with important implications for certain policy development proposals—specifically, those proposals which recommend shortening the list of felonies that justify use of deadly force to capture fleeing suspects. Such proposals typically involve striking burglary from the list. Our findings raise questions about whether such a reform approach is ideal, although we concede that it would be preferable to leaving the current Chicago policy unchanged.[46] Deadly force policies which, like Chicago's, deal with the fleeing suspect situation by listing specific offenses, are usually premised on one key generalization: that persons who may have committed these offenses are sufficiently violence-prone that they are likely to inflict serious injury on someone in the near future if not apprehended immediately. Whether or not this generalization is accurate is open to debate. Our data do not address the point of future violence. What the data do show, however, is that among the 523 civilians shot by police during our study period not all exhibited violent behavior even at the time they were shot. Indeed, the burglary suspects shot by police most often were shot for fleeing, and there was little evidence in police records that the shooting officers had any basis for suspecting that the alleged burglaries involved personal violence.[47] The probably accurate generalization that burglars typically do not inflict injury on crime victims underlies the reform proposals to strike burglary as a shooting justification. The problem with any approach that involves such generalizations is that these generalizations have important exceptions.

Some of the burglary suspects shot by police in our study were fired upon after threatening officers with deadly weapons. Those who would eliminate burglary from the list of shooting justifications could accurately respond that such suspects could still be shot by police, even after burglary was deleted, in light of the officer's right to defend his or another person's life. Generalizations about future dangerousness, we submit, are likely to lead officers to unthinking, categorical responses to fleeing felony suspect cases. For example, if, as is the case in Chicago, robbery is among the deadly force policy's set of forcible felonies, then, we would argue, officers will be inclined to fire at fleeing robbery sus-

46 Burglary suspects constituted nearly half of all suspects shot by Chicago police for fleeing, so the elimination of burglary from the set of forcible felonies which justify lethal capture could dramatically affect the number of "fleeing felon" shootings.

47 See W. GELLER & K. KARALES, *supra* note 32, at 30, for a discussion of the legislative intent behind the Illinois deadly force statute.

pects without stopping to think about the probable dangerousness of the individual in flight. Our data have shown that a number of armed robbery suspects offered no resistance to police other than flight. Yet, one may well expect from the threat of violence inherent in an armed robbery that the robbery suspect would violently confront responding police officers. Because the relationship between the seriousness of the *suspected* crime and future dangerousness has not been established, we would prefer a deadly force guideline which made the immediate danger posed by the suspect, rather than the nature of his possible criminal offense, the justifying factor.[48]

Also important in devising control strategies is an awareness that a significant number of shootings *by* police and a majority of shootings *of* police take place while the participating officers are off duty. Preventive measures aimed at such shootings may need to address concerns which would be largely irrelevant to the reduction of on-duty shootings. For example, off-duty officers may be carrying their guns when they are drinking alcohol; off-duty officers do not routinely carry police radios and thus cannot depend on instant communication with the department in emergencies; and, like on-duty plainclothes police, off-duty officers typically intervene on their own initiative and thus lack the "legitimacy" and time for mental preparation that derive from a civilian call for assistance and that may tend to deter forceful resistance to police authority.[49]

Just as policy and training may need to be tailored to suit special considerations associated with off-duty shootings, so control strategies may need to address different issues with respect to different units of police departments—units which frequently are engaged in quite disparate types of police work. Although police in nearly every major unit of the Chicago Police Department have been involved at one time or another in shootings, officers in a handful of units are far more likely than other sworn personnel to shoot civilians and to be shot by civilians while on duty.

Our analysis of police shooting files, coupled with a review of the literature and consultation with police administrators and front-line personnel, suggests the need for control strategies that prohibit certain types of "elective" shootings, supplement officers' human relations and non-lethal tactical skills, and correct bad gun handling habits. Such strategies should be framed with an awareness of particular requirements for the regulation of off-duty shootings and shootings by officers

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[48] We say "immediate" danger because clinical research suggests that people are remarkably inaccurate in predicting whether an individual will engage in *future* violent behavior on the basis of his past conduct. *See id.* at 187.

[49] *See* A. REISS, JR., *supra* note 7.

in specialized units. Furthermore, deadly force policies should not be based on generalizations about the relative dangerousness of suspects in different types of crimes.

The control strategies set forth briefly[50] below are by no means the only reasonable ways to work toward the reduction of "avoidable" shootings, but they seem to be promising ones. A number of these strategies or variations of them are already being used by some police departments, including the Chicago Police Department. We urge police administrators to give serious consideration to employing all these techniques in their on-going efforts to control police shootings.

General considerations bearing on the avoidability of shootings by police include the following: (1) the degree to which the officer's or another person's life would be immediately endangered if the officer did not shoot; (2) the availability of alternative, less violent means of capturing a suspect; (3) the extent to which the officer can obviate use of deadly force against a potentially violent suspect by using better search and field interrogation techniques or by maintaining cover and controlling the situation until a non-lethal capture can be accomplished; (4) the degree of risk to bystanders which might be posed by police use of deadly force; (5) the reliability of information upon which the officer's irreversible decision to shoot is made; and (6) the extent to which officer carelessness, nervousness, bad gun handling habits or other "correctable" factors were largely responsible for the shooting.

Applying these criteria to the data presented in this part and in part I of this article leads to the conclusion that a sizeable number (at least a third) of shootings by police officers are avoidable. Many such shootings are prompted by civilian conduct that does not immediately jeopardize the lives of officers or the public (non-violent flight being a prime example). Others seem to be the result of poor gun handling habits (carrying cocked revolvers, carelessness in gun cleaning, etc.). In many cases, greater tactical and human relations skills could have given officers the "strategic edge" necessary to permit them to resolve a potentially violent encounter without firing their weapons or placing themselves in grave danger.

The control strategies fall into four basic areas: policy development, policy enforcement, personnel practices, and training and weapons. The first area, policy development, is certainly the most controversial. Nonetheless, we recommend the adoption of a "defense-of-life" shooting policy, with the following as its core message:[51] *A police*

[50] For a fuller discussion of these strategies, see W. GELLER & K. KARALES, *supra* note 32, at 183-200.

[51] We recognize that amplification is required on a number of points, such as shooting as

officer is justified in using deadly force only when such force is intended to defeat a present threat to the officer's or another person's life. This policy is justified on a number of grounds, including the following: (1) It justifies shootings based on information easily and instantly available to officers in the field—their honest perception of immediate danger—rather than on generalizations about the future dangerousness of persons suspected (rightly or wrongly) of having committed any one of a series of enumerated felonies; (2) the recommended policy, which admittedly is based to an important extent on value choices, would not inhibit police officers from shooting when they honestly felt it was necessary to protect their own or someone else's life; (3) the shooting of a person who is not immediately jeopardizing someone's life may be discovered subsequently to have been prompted by misinformation about the shooting victim's prior or likely future conduct—even if predictions about the future "dangerousness" of a fleeing suspect are based on accurate information about past behavior, such predictions have been demonstrated by clinical experiments to be woefully inaccurate; (4) policies which do not restrict shootings to defense-of-life situations permit the killing of people for the *possible* commission of crimes that they would never be executed for if convicted; and (5) very often, "lethal capture" of nonthreatening suspects fails to accomplish its ostensible purpose—to take a criminal suspect alive and bring him to trial. To the contrary, the use of deadly force without the necessity to defend life has engendered widespread resentment of police, especially in minority communities, making the broad spectrum of police work that much more difficult.

The defense-of-life and other restrictive policies have been gaining increasingly widespread support. They have been adopted by a number of police departments[52] with considerable success. Such policies have helped reduce the number of shootings of civilians *and police officers* without adversely affecting arrest rates.[53] For example, in New York City, fewer civilians and police were shot following the adoption in 1972 of a policy which, as enforced, imposed a defense-of-life standard on of-

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a last resort, the reasonableness of the officer's perception of danger and whether the policy should be a matter of state law or departmental regulation.

[52] For example, the defense-of-life policy is in use in New York City, Washington, D.C., New Orleans, Atlanta, Newark, Detroit, Oakland, Kansas City, Mo., Houston, San Jose, Reno, and a number of small-to-medium-size departments throughout California. In addition, most federal law enforcement agencies employ the policy, including the FBI; Secret Service; Alcohol, Tobacco and Firearms; Customs; IRS; Drug Enforcement Administration; and U.S. Postal Inspectors. Many departments impose other, less stringent, restrictions, such as prohibiting shooting at non-violent burglary suspects, prohibiting shots at or from moving vehicles, and prohibiting warning shots. *See* W. GELLER & K. KARALES, *supra* note 32, at 20-52.

[53] *See id.* at 39-41, 183-87.

ficers.[54] In Kansas City, a marked reduction in shootings of young people followed the promulgation by that department of a rule forbidding shots at juveniles, except in defense of life.[55] And in Oakland, the Chief concluded some years ago that a prohibition of shooting at nonviolent burglary suspects avoided much bloodshed and failed to affect adversely the apprehension rate for such suspects.[56] These and other positive experiences with restrictive policies have led to advocacy of the defense-of-life policy or very similar policies by many empirical researchers and legal commentators, as well as public officials and community leaders and their agencies or organizations.[57]

While the essence of a policy on when to shoot should not differ for on- and off-duty officers, we offer for consideration several recommendations respecting off-duty shootings which could be a part of a comprehensive deadly force guideline. Of prime importance are the following:

—Off-duty officers should generally be prohibited from carrying guns when they anticipate consuming alcoholic beverages.[58]

—Greater restrictions should be imposed on the types of weapons that may be carried by officers, and consideration should be given to tightening the minimum standards of proficiency required of officers with these weapons. A disproportionate number of accidental self-inflicted wounds were suffered by officers using weapons other than service revolvers (especially

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54 Fyfe, *supra* note 38.

55 C. MILTON, *supra* note 28.

56 C. Gain, Discharge of Firearms Policy: Effecting Justice Through Administrative Regulation (Dec. 23, 1971) (unpublished statement). *See also* Tsimbinos, *The Justified Use of Deadly Force*, 4 CRIM. L. BULL. 3 (1968); Uelman, *Varieties of Police Policy: A Study of Police Policy Regarding the Use of Deadly Force in Los Angeles County*, 6 LOY. L.A. L. REV. 1 (1973).

57 Included among these advocates are the U.S. Commission on Civil Rights; the New York State Division of Criminal Justice Services; Atlanta Public Safety Director Lee Brown; Newark Director of Public Safety Hubert Williams; San Jose Police Chief Joseph McNamara; Community Relations Service (of the U.S. Justice Department) Director Gilbert Pompa; Police Foundation President Patrick V. Murphy; the National Organization of Black Law Enforcement Executives; the National Black Police Association; Police Executive Research Forum Executive Director Gary Hayes; International Association of Chiefs of Police Deadly Force Research Project author Kenneth Matulia; the National Urban League; the American Civil Liberties Union; the N.A.A.C.P.; the National Minority Advisory Council on Criminal Justice to L.E.A.A.; the Chicago Law Enforcement Study Group; the Public Interest Law Center of Philadelphia; the Chicago Council of Lawyers; former Cook County (Il.) State's Attorney Bernard Carey; and researchers Lawrence Sherman, James Fyfe, Kenneth Clark, Richard Harding, Richard Fahey, Ralph Knoohuizen, and Paul Takagi. For citations to the position statements of these individuals and agencies, see W. GELLER & K. KARALES, *supra* note 32, at 39-40, 183-85.

58 We have not taken a position on the broader question of whether off-duty police should be permitted to carry guns at all because insufficient data exist on which to form an opinion. Research should be conducted on the productivity of off-duty police (number and quality of arrests and other types of service, including deterrence, etc.) and the possible risks to off-duty officers that may stem from their being unarmed. One of the leading commentators has taken a position against the arming of off-duty officers. *See* Fyfe, *supra* note 1.

semi-automatic handguns). (Several of these points relating to weapons should be considered for on-duty officers as well.)
—Police officers may need additional guidance in the kinds of incidents to which they should respond while off duty and special reminders about the dangers of resolving their own disputes by taking police action. The unavailability to off-duty officers of police radios with which they could instantly summon assistance and check information, such as automobile registration, may make it inadvisable for off-duty police to intervene in situations which do not obviously require immediate police attention. To similar effect are the reduced mental preparation time and legitimacy of off-duty officers as compared to on-duty officers.[59] As the Police Foundation urged in its 1977 report on police shootings, "off-duty officers should avoid becoming involved in minor incidents or fights and should be wary of using their police office to try to adjudicate disputes to which they themselves are party."[60]

A defense-of-life standard or any other policy is only as good as its enforcement. A number of control strategies seem appropriate for policy enforcement, some of which are already used and others of which are presently under consideration by the Chicago Police Department.

A key mechanism for policy enforcement is investigation of every reported shooting to determine the justifiability of the officer's conduct and the degree of any punishment that may be warranted. Presently, the Chicago Police Department's civilian-staffed Office of Professional Standards (O.P.S.) has prime responsibility for investigation of shootings. The deterrent impact, if any, that O.P.S. findings have is difficult to determine from the data we have collected.[61] In theory, at least, it would seem that a review system that meted out significant—or at least consistent—penalties to errant police officers and offered support to officers who complied with relevant rules should help prevent other officers from engaging in wrongful shootings.

Perhaps as important as review of a shooting case to determine whether punishment is justified is review to determine whether, even if justified, the shooting was avoidable. Toward this end, we suggest that the Chicago Police Department seriously consider the creation of a "shooting review panel," in addition to the O.P.S., which would be composed both of senior police administrators (including some from the training division) and of officers of the same rank as the officer whose shooting is under review. This panel would review all shots fired by

59 *See* text accompanying note 49 *supra*.

60 C. MILTON, *supra* note 28.

61 See text accompanying notes 29-31, for a discussion of the correlation over time between O.P.S. decisions and shootings by police. Also complicating the effort to assess the impact of O.P.S. shootings is the consistent lack of public disclosure of the outcomes of O.P.S. shooting investigations. The Police Department's annual statistical report should include the results of O.P.S.' shooting investigations, just as it currently reports O.P.S. dispositions of nonfatal force cases.

police, whether or not anyone was struck by the bullets. Although jurisdictional details vis-a-vis the O.P.S. would have to be worked out, the main purposes of this panel would be different from those of O.P.S. The panel would debrief officers and others involved in shootings—both shootings by and shootings of police; refer officers for any necessary counseling or retraining (or for appropriate commendations); and identify systemic methods of reducing shootings of and by police consistent with officer and public safety.[62] These systemic methods, which should be referred for consideration to appropriate departmental officials, might include revision of all of the following elements, among others: the disciplinary system; classroom, range, and field training; the supervision and accountability structures that apply to front-line personnel; psychiatric and family counseling; hiring and promotion criteria; deployment and dispatching techniques.

Such a panel would need to collect different kinds of information on shootings than is currently collected for disciplinary purposes and would need to treat police officers as "expert witnesses" on the question of how to improve departmental policies, training, supervision and operations so as to obviate shootings and ensure officer and public safety. Other promising policy enforcement techniques might include field supervision, communication by headquarters to district-level administrators of information about patrol officers who are "violence-prone," and review of police shootings not only by the Police Department but by local and federal officials and, with appropriate safeguards, by private entities.

A third control strategy concerns personnel practices. Officers should be hired, promoted, and commended or disciplined with an awareness that, while "toughness" is critical to the police role, an important component of police work is nonviolent problem solving. Psychological screening tests and routine monitoring of officer behavior should

62 The recommendation that a shooting review panel be considered raises some practical issues which will need to be addressed in connection with the establishment of such a panel. For example, the possibility of expanded civil or criminal liability of individual officers and the city based on information disclosed to the review panel would need to be considered. Research should be conducted to determine how other police departments (*e.g.*, New York City and Los Angeles), which have entities somewhat like the proposed review panel, have resolved these liability questions. It is possible that legislation would be appropriate to prohibit in court use of information disclosed to the review panel. (The officers involved, however, could still be subpoenaed to appear before a grand jury.) On the other hand, it may be that other departments have found it appropriate and feasible to take the position that full disclosure of information pertaining to shootings is so important that it is worth increasing the chances of individual and municipal liability to get it. Police morale issues would need to be addressed also, for a multiplicity of shooting reviews could prove counterproductive if police respond by refusing to engage in appropriately aggressive police work. *See* W. GELLER & K. KARALES, *supra* note 32, at 33-34.

be used to the extent that they can help separate officers who would properly exercise their discretion to use deadly force from those who would not.

After identification of officers who need some special attention, a number of options are available, such as supportive psychological counseling, reassignment to more appropriate duty, punishment, and retraining. The last option—and our fourth area of control strategies—is an essential control technique with as much promise as policy development for reducing the incidence of police shootings.

Police officers must be armed not only with the service revolver but with a battery of nonviolent strategies to control and defuse dangerous situations. If training does not provide officers with effective alternatives to the use of deadly force, policy statements demanding that such force be used only as a last resort will be of little benefit other than for public relations purposes. Training should encompass teaching departmental policy, human relations skills and tactical skills.

Policy should be taught in such a way that a department's position is not simply a set of phrases, like a *Miranda* warning, to be memorized by officers almost without regard to the meaning of its words. This suggests that policy should be explained, as it is currently by Chicago Police Department trainers, with the aid of realistic fact situations. Additionally, it would be very useful if policy could be applied by officers in mock role-playing sessions, which may not now be done to full advantage by the Department.

Human relations techniques should be given prominence at the training academy. In addition to teaching police officers about unfamiliar cultural traditions of Hispanics and blacks, more attention might profitably be paid to teaching basic techniques for nonviolent persuasion.[63] Inevitably, police officers sometimes must resort to force if they are to perform their job adequately, but the occasions when force is necessary could probably be decreased with the aid of creative human relations training.

Skills for defusing potentially violent encounters and nonviolently resolving them with a minimum of risk to the officers and innocent bystanders are sorely needed. Our data suggest that the vast majority of the officers who shot civilians had no cover at the time of the shooting. We are unable to determine how many of these officers could have

63 A Chicago Tribune poll in late 1978 found that 45% of the sampled black residents of Chicago agreed with the statement that police officers in their neighborhood "do not show respect for people and use insulting language." Perhaps more important, *71%* of the respondents aged 18-24, a group which has a disproportionate share of violent encounters with police, answered this survey question affirmatively. Hartzell, *Crime, Unemployment, Blacks' Top Problems*, Chicago Tribune, Oct. 16, 1978, at 1, col. 1.

availed themselves of some protective barriers, but we assume that an intensive training cycle focused on maintaining cover and positioning[64] while dealing with potentially dangerous suspects would significantly help reduce the number of shootings.

Other areas for improvement include: (1) training officers as to when "heroic" action on their part is commendable and when it could prove counterproductive; (2) developing new field decision-making approaches that bring supervisors whenever possible into the decision of whether and when to shoot, so that use of deadly force need not so frequently be a "split-second decision;"[65] and (3) providing an *outdoor* training facility which would expand the capacity of departmental trainers to prepare police officers to be more effective with less bloodshed.

Several recommendations can also be made concerning weapons, including: (1) increased range practice and instruction in the handling of service revolvers and other guns; (2) greater restrictions on the types (and possibly the number) of handguns officers can carry; (3) modification of service revolvers to preclude "single-action firing," a method that involves cocking the weapon, which has been responsible for a number of accidental shootings of civilians and police officers; and (4) exploration of the extent to which modern, "less-lethal weapons" can be used, as they are in several other departments, to facilitate effectively the nonlethal capture of certain kinds of criminal suspects.[66]

All of these control strategies depend for their effectiveness on accurate information about the nature and extent of the control needed and on feedback about the impact of the strategies on shootings. Future research,[67] whether performed by outsiders, the Chicago Police Department's own researchers, or a combination of the two, would provide additional information useful for further reducing police-involved shootings. These inquiries will only be possible if the Police Department routinely collects and analyzes or permits others to collect and analyze the necessary data on police-involved shootings.

This study has looked at phenomena known as "police shootings," a subject about which little has been known but much has been said. Widely disparate kinds of interactions are encompassed by the term—

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64 By "positioning" we have in mind an expansion of the kind of training already given to Chicago police officers on how to approach a driver in a traffic stop so that the officer is able to see the suspect's hands and the suspect is not able to view easily the officer without turning. For a discussion of various "officer survival" techniques that facilitate non-violent resolution of potentially serious police-civilian encounters, see Fyfe, *supra* note 1.

65 Reiss, *Controlling Police Use of Deadly Force*, 452 ANNALS 122 (1980).

66 For more detail concerning several of these recommendations, see W. GELLER & K. KARALES, *supra* note 32, at 180-205.

67 See *id* at 201-03, for a list of topics needing further empirical research.

from self-defense shootings to self-inflicted shootings. The different types of shootings are susceptible to very different types of control, and no single strategy for reducing shootings is relevant to all types of events. Police and the public at large have a common interest in identifying and employing the most effective control strategies possible, for the divisive impact that police-involved shootings can have on the community undermines all other efforts to combat crime and ensure public safety. More effective use of police policy, training and review processes can better equip officers to resolve creatively, deliberately and successfully many potentially violent situations without resort to deadly force.