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Aggression and Violent Behavior



Reducing police use of force: Case studies and prospects



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ABSTRACT

Police codes of conduct require officers to use the minimum amount of force when enforcing laws and maintaining order. At the same time, the use of excessive or unnecessary force is a major problem internationally. The purpose of this paper is to address the possibility of reducing violence in police–citizen encounters and controlling police use of force, especially at the levels that cause injuries and threaten public trust and confidence in the police. A search of the literature was conducted to identify case study reports of apparent success in this area, focused on intervention projects with time series data. Seven cases were selected and analyzed, covering a variety of indicators of force and excessive force. Our study shows that police departments can reduce the levels of force used to enforce laws and maintain order. Strategies identified in the review targeted individual, cultural and organizational factors and included equipping officers at the individual level with the appropriate skills, and providing a framework of internal and external accountability. In particular, we show the value of a Problem Oriented Policing (POP) approach that focuses on diagnostic research, tailor-made interventions, and impact evaluation.

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1. Introduction

Policing is widely described as involving the use of force in pursuit of goals of law enforcement, crime prevention and order maintenance (Lersch & Mieczkowski, 2005). Police are expected, on occasions, to

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subdue suspects physically, and this can involve serious injury or even death. The right to use force is necessary, but it entails the potential for officers to misuse this authority and engage in unnecessary or excessive force. Consequently, criminal and civil laws normally specify conditions under which police may use force lawfully (McCoy, 2010). Police codes of conduct have also been developed to clearly identify standards. Codes normally make explicit the requirement that police use minimal force that would be considered reasonable in the circumstances in proportion to the threat or seriousness of the offense, and only as a last resort option (e.g., *International Association of Chiefs of Police, 2002*). The United Nations *Code of Conduct for Law Enforcement Officials* stresses how the principle of minimal force should apply regardless of specific law or policies in any jurisdiction. Special mention is also made of the need to control the use of firearms by police, with their added potential for deadly effect:

The use of firearms is considered an extreme measure. Every effort should be made to exclude the use of firearms, especially against children. ... In every instance in which a firearm is discharged, a report should be made promptly to the competent authorities (*United Nations, 1979, p. 2*; see also *United Nations, 1990*).

Within these legal and ethical frameworks, police can be disciplined departmentally for unjustifiable force, and they can also be charged criminally for assault. There is also usually a capacity for citizens who believe they are victims of excessive force to make an official complaint or seek a remedy by suing police in the civil courts (McCoy, 2010).

Despite various internal and external controls, inappropriate and excessive force by police has been an ongoing major problem in many countries. For example, a 1998 report on police brutality in the United States found that:

Police abuse remains one of the most serious and divisive human rights violations in the United States. The excessive use of force by police officers, including unjustified shootings, severe beatings, fatal chokings, and rough treatment, persists because overwhelming barriers to accountability make it possible for officers who commit human rights violations to escape due punishment and often to repeat their offenses (*Human Rights Watch, 1998, p. 25*).

Findings like these are a commonplace of judicial inquiries, government reviews, and academic research around the world (Alpert & Dunham, 2004; Bayley, 1996; Porter & Prenzler, 2012). Further, the list of types of excessive force can be extended beyond those in the Human Rights Watch summary, including torture, dangerous vehicle pursuits, and the violent suppression of public protests – including with dogs, whips and batons.

There is a growing body of research that examines levels and types of police force. In most democratic countries, the use of force is rare compared to the total number of police–citizen encounters (Lersch & Mieczkowski, 2005). One of the more widely cited sources is a periodic interview-based survey conducted by the United States Department of Justice. The 2008 survey included slightly fewer than 60,000 respondents. It found that only 16.9% of respondents aged 16 and over had face-to-face contact with police. Of these, 1.4% said they had force ‘threatened or used against them during their most recent contact’ (Eith & Durose, 2011, p. 12). This was projected to amount to approximately 574,000 persons. Within this group, 76.6% said they had been threatened with force, 75.5% said they had been shouted at, 53.5% said they had been grabbed or pushed, 25.6% said a gun was pointed at them, 12.6% said they had been hit or kicked; and 18.9% said they were injured (p. 13). In addition, within this same group, 83.9% felt the police ‘acted improperly’ and 74.3% believed the force was ‘excessive’ (about 517,000 persons) (2011, pp. 13–14).

While police use of force is ‘rare’, its study and management are extremely important because force ‘can cause injuries to officers and/or citizens and is the major police issue that leads to community unrest

and negative attitudes toward the police’ (Alpert & Dunham, 2010, p. 236). Aside from the various forms of injury and injustice experienced by victims of police violence, taxpayers also bear the cost of complaints investigations and successful lawsuits (Porter & Prenzler, 2012). It is also the case that police themselves are often the victims of inadequate force policies and training.

Lersch and Mieczkowski (2005) reviewed the literature on violent police behavior and noted three broad theoretical perspectives on the causes: psychological theories that focus on individual officers as ‘rotten apples’, sociological theories that focus on the culture of policing as isolated from non-police, and organizational theories that focus on the systems in place within an organization for managing its members. Lersch and Mieczkowski (2005) note that none of these approaches is adequate alone as an explanation of why some officers act violently, while other officers do not.

Various forms of cross-sectional and predictive studies have been applied to police use of force, often with very mixed results (e.g., Alpert & Dunham, 2010; Harris, 2009; Klahm & Tillyer, 2010; Klingler, 2010; Lersch & Mieczkowski, 2005; Reiss, 1971; Terrill & Mastrofski, 2002). Complaints about excessive force are often concentrated among a small number of ‘problem officers’. Not surprisingly, it also tends to be the younger, less experienced, front-line, officers who are more likely to use force and more likely to attract complaints. While these officers may be assigned to places and times that are dangerous, there is evidence that young officers also use more force and higher levels of force than their experienced counterparts. There is also some evidence that female officers are less likely than male officers to use force and attract complaints (Braithwaite & Brewer, 1998; Lersch & Mieczkowski, 2005; Waugh, Ede, & Alley, 1998). It appears that this is partly because female officers are simply less likely to attract male aggression, but the conciliatory style of women police is also a key factor. There is also some evidence that better educated officers are less likely to use force (Rydberg & Terrill, 2010; Terrill & Mastrofski, 2002). These findings support the individual-level explanation for use of force noted above. Lersch and Mieczkowski (2005), while not explicitly linking to the theory, note that strategies focused on individual level factors have been put in place to deal with excessive force, such as Early Warning Systems that target officers with high numbers of complaints, or increasing the hiring of female officers.

Lersch and Mieczkowski (2005) discuss the importance of internal control of organizations in managing police force, which would seem to be linked to organizational theories of police behavior. Indeed, there is some broad evidence that tightened law and policy in regard to justifications for the use of firearms has led to reduced discharges and fatalities (Walker & Fridell, 1992). There has also been considerable interest in recent years on the effects of ‘less-than-lethal’ weapons, including OC (‘pepper’) spray and CEWs (conducted electronic weapons or ‘Tasers’®). Despite the potential for misuse, studies of force incidents show that those involving these weapons result in far fewer injuries to citizens and police than incidents involving hands on force (Alpert & Dunham, 2010; Sousa, Ready, & Ault, 2010; Taylor & Woods, 2010; Thomas, Collins, & Lovrich, 2010).

Use of force also tends to be more common in higher crime areas, and younger males are more likely to be on the receiving end of police force. Not surprisingly, persons suspected of crimes are much more likely to have force used against them. Ethnic or racial minorities are also more likely to experience force (Holmes & Smith, 2012). Discrimination can be a factor, but higher crime rates can be part of the problem. Holmes and Smith (2012) argue that neighborhood factors, particularly of minority disadvantage, evoke social psychological processes that result in excessive force responses. Community policing was discussed by Lersch and Mieczkowski (2005) as a strategy to reduce excessive force. Community policing not only makes police officers more visible and accountable within communities, but also encourages community contact that could help to reduce stereotypes and feelings of difference that can encourage an isolated police culture.

Research has focused on factors that influence reduced force, especially inappropriate or excessive force, and targeted intervention projects have also been undertaken to reduce police use of force. However, these studies have not been integrated in a way that enables wider lessons to be learnt. Further, the link between the findings of these studies and theories of police use of force has not explicitly been made. The present paper presents a number of case studies of police force reduction initiatives and utilizes the aggregated results to present evidence for theories of police force, as well as outlining promising avenues that jurisdictions can follow to achieve similar outcomes.

2. Method

The authors conducted a search for case studies that assessed the impact of interventions to reduce police use of force using time-series data. Systematic searches were conducted in Criminal Justice Abstracts, with keywords including 'police' and 'use of force', 'excessive force', 'assault', 'injuries', 'complaints' and 'reduction'. The keywords were also used in general internet searches. Initial findings were analyzed in terms of indicators of reductions in force and the strength of the evaluation methodology. While evaluation quality was a key criterion in case selection, few if any of the studies included model evaluation methods in terms of both control groups and measurement of impacts over several years (Farrington, Gottfredson, Sherman, & Welsh, 2002). However, studies were included where types of controls were apparent that minimized the chances of non-identified factors impacting on the experimental group or where it seemed plausible that impacts were largely attributable to the interventions.

A final list of seven case studies went forward for detailed analysis and evaluation. However, mention should be made of a number of useful studies that could have been included had they contained a little more detail. Davis, Mateu-Gelabert, and Miller (2005) reported on major reductions in complaints – in the order 54% and 64% – in two Bronx precincts in the 1990s. These declines were attributed to the implementation of a 'courtesy, professionalism and respect policy' ('CPR'), a verbal judo course, and close monitoring of staff with complaints histories – including pairing officers with multiple force complaints with more experienced officers. However, the evaluation was restricted to general complaints data, and these did not separately identify excessive force allegations. A recent review of use of force issues in the Albuquerque Police Department provided another potentially instructive study (Police Executive Research Forum, 2011). Substantial reductions in police use of force reports were identified, along with reduced assaultive actions by suspects and resistance to arrest by suspects. At the same time, there was an increase in officially recorded assaults on police. It is possible that the improvements resulted from the adoption of less-than-lethal weapons, enhanced conflict resolution training and the introduction of an early intervention system. However, the exact numbers of incidents were not reported, so the study was not included in this paper.

Finally, an older study on high-speed police vehicle pursuits also showed promise but included only summary information. Alpert (1997) compared changes in policy in two police departments in the 1990s. Metro-Dade introduced a more restrictive 'violent felony only' policy for pursuits. Details of the policy were not provided, but the department reported that 'the number of pursuits decreased 82 percent the following year' (from 279 to 51) (p. 4). In contrast, the Omaha Police Department adopted a 'more permissive' policy in 1993: 'The following year, the number of pursuits increased more than 600 percent' (from 17 to 122) (p. 4). However, it was not clear if the pre- and post-intervention periods were comparable; and although the study included data on injuries, property damage, and other outcomes of pursuits, these were not included in a time-series format.

2.1. Case studies

The seven case studies are presented in detail below. Summarized details are provided in Table 1, addressing the key aims, interventions and outcomes achieved in each.

3. Findings

3.1. The Oakland Police Department's Violence Reduction Unit

One of the earliest accounts of a programmatic approach to reducing police use of force comes from the Oakland Police Department (Toch & Grant, 2005). The creation of a Violence Reduction Unit is an example of problem oriented policing and action research, targeted at physical conflict between police and citizens. In the 1960s, the Department was characterized by a simple crime fighting strategy of maximum arrests. Unintended consequences included 'high rates of police-citizen conflicts' and, in particular, alienation of police from the African-American community where high crime levels were associated with endemic poverty (pp. 91 and 92–97). A reform-minded Police Chief – Charles Gain – directed a program to reduce violence in police work and improve relations with the community. In consultation with academic researchers, the Chief established the Violence Reduction Unit in 1969, staffed on a part-time basis with officers 'charged with studying police-citizen violence and devising interventions that could address the problem' (p. 97). The academics – Toch, Grant and Galvin – had conducted research on male violence, which emphasized the potential of early intervention with subjects displaying violent tendencies. This led to the idea of a police peer-based early intervention system. It appears that officers were required to attend a Peer Review Panel if they were nominated by their supervisors for involvement in above average numbers of violent confrontations. Participation in the panel involved discussions about the incidents. Officers were encouraged to identify factors in their behavior and attitudes that may have contributed to conflict, and made commitments to a changed approach to suspects.

The most recent report on the project (Toch & Grant, 2005) was a retrospective book that contained detailed accounts of the panel discussions, but little about behavioral change, if any, by panel participants. The book included the original impact assessment, involving a number of measures over a four-year period. The main measures were records of (1) all arrest-related 'citizen-officer conflicts' involving 'physical confrontations', including where the suspect was eventually not charged (pp. 226, 224), (2) three types of charges relating to 'resisting arrest ... battery or assault on a peace officer ... and assault with a deadly weapon on a peace officer' (p. 224); (3) citizen and officer injuries related to incidents that led to charges of resisting arrest, battery or assault and assault with a deadly weapon; and (4) citizen complaints against police.

The data on arrest-related instances of physical conflict were reported in a chart without specific numbers, and only over a three-year period. The chart showed that all incidents fell each year, from approximately 1900 in 1971 to approximately 1250 in 1973 – a drop of approximately 34.2% (p. 226). Across four years, incidents involving charges for resisting arrest showed consistent but unspecified declines (p. 226). However, those involving battery or assault on a peace officer, and assault with a deadly weapon on a peace officer, only fluctuated slightly over the years. Injuries to citizens charged with offenses rose and then dropped sharply in the final year (p. 227). In 1970, there were 70 injuries to citizens recorded in this category, followed by 78 in 1971, 85 in 1972 and 22 in 1973 – a 68.5% decline overall. For injuries to police, there was some fluctuation, also followed by a sharp drop in the final year: 93 cases in 1970, 71 in 1971, 78 in 1972 and 27 in 1973 – amounting to –70.9% overall. Citizen complaints fell each year from 645 in 1970 to 206 in 1973 – a reduction of 68.0% (p. 228).

The results were, therefore, mixed, with some problematic issues about measurement. For example, the report only listed the total number of complaints against police. No specific figures on excessive force or

Table 1
Summary of the case studies and their achievements.

Case study	Trigger	Aim	Action	Intervention	Areas of observed reductions
Oakland	Police–citizen conflict, alienation of African-American community	Reduce violence in police work and improve relations with the community	Established the Violence Reduction Unit	Officers required to attend a Peer Review Panel if involved in above average numbers of violent confrontations	<ul style="list-style-type: none"> • Arrest-related instances of physical conflict • Incidents involving charges for resisting arrest • Citizen complaints • Citizen and officer injuries
Metro-Dade	Use-of-force incidents	Enhance patrol officers' skills in defusing potentially violent situations	Taskforce analyzed records	Training program	Use of force
New York	Firearms incidents	Assess and reduce shootings	Collected in-depth documentation of discharges during hostile encounters	<ul style="list-style-type: none"> • Analyses of the variables and sequences of events of incidents • Feeding the findings into improved procedures and training • More stringent guidelines on deadly force 	<ul style="list-style-type: none"> • Shots fired • Persons shot and injured by police • Persons shot and killed by police • Officers shot and injured • Officers shot and killed
Portland	Police shootings and excessive force allegations	Reduce police use of force	Established the Independent Police Review Division	<ul style="list-style-type: none"> • New policies • New use of force review board • Improved training • Use of force reports 	<ul style="list-style-type: none"> • Shootings • Use of force reports • Complaints of excessive force • Citizen injuries • Officer injuries
Tasmania	Complaints	Reduce complaints	Commitment to reduce complaints	<ul style="list-style-type: none"> • Recruit screening test • Increased ethics training • Early intervention system • Improved complaint handling • Improved training 	<ul style="list-style-type: none"> • Public complaints • Assault allegations • Excessive force allegations
Victoria	Fatal shootings	Reduce shootings	Project Beacon	<ul style="list-style-type: none"> • Improved training • Use of force register • Introduction of OC spray 	Fatal shootings
England and Wales	Accretion of policy changes	Improve custody procedures	Establishment of the Independent Police Complaints Commission	<ul style="list-style-type: none"> • Changes in laws and guidelines • Improvements in cell design • Police taking persons directly to hospital instead of the watchhouse • Addressing detainee health issues at the time of admission • Custody visitor scheme • Assessments and monitoring of detainees 	Deaths in or following police custody

assault allegations were included. There were also no clear timelines for the intervention. Where improvements were indicated, these were attributed to the program, although there was no tracking of data related to officers who participated in the peer review panel process. Furthermore, the authors conceded that 'we have no explanation' for the sudden drops in injuries at the end of the evaluation period (p. 228). Large staff cuts in the Oakland Police Department led to the phasing out of the project as the 1970s progressed – a move the authors associated with large, but unspecified, increases in police violence (2005, p. 100).

3.2. The Metro-Dade Police/Citizen Violence Reduction Project

Perhaps the most famous project aimed at reducing police use of force involved a partnership, begun in 1985, between the Metro-Dade Police Department (MDPD) and a research and policy institute, The Police Foundation. The genesis of the project lay in 'civil unrest springing from controversial use-of-force incidents' in the late-1970s and early-1980s (Klinger, 2010, p. 105). The project was unusual in being built from the ground up, with a full experimental design. The aim was to 'enhance patrol officers' skills in defusing the potentially violent

situations they encounter every day' (Police Foundation, 1988, p. 6). A taskforce analyzed records and identified four areas of police actions most closely associated with violent incidents and with public dissatisfaction (p. 7):

- Routine Traffic Stops
- High Risk Vehicles Stops, in which motorists are suspected of offenses other than traffic violations or driving while intoxicated
- Reported or suspected Crimes in Progress, including field interrogations of suspicious persons
- Disputes.

The project team also identified four stages in situations of potential violence where officers could take alternative actions to avoid conflict or injury. These were 'unassigned patrol time ... approach and preparation ... contact ... [and] resolution' (p. 6). An observation method was developed to identify effective 'defusing techniques' that could be used more extensively (p. 7). The recording forms 'generally required responses to forced questions about objective, observable behavior' (p. 7).

The results were used to inform a three-day training program based on simulations, with professional actors role-playing potentially violent situations. Training also included lectures and case history videos (Klinger, 2010). Pre-intervention data were recorded with observers accompanying a random sample of patrol officers across three districts: designated A, B and C. This involved 502 eight hour tours and 1148 situations identified as potentially violent. Half of the officers were given the intensive training. Post-intervention observations were then conducted, covering 375 tours and 994 potentially violent situations.

The findings were considered positive on the whole, with some variation between the three districts. The main findings were summarized as follows (Police Foundation, 1988, pp. 8–9):

The effects of the program ... were most measurably positive in District C, a largely middle class and suburban community of white Anglos and white Hispanics ... where the major reported crime problem is vehicle larceny, and where violent crime rates were far lower than in either of the other study districts. In District C, we find significant positive change in 24 percent (17) of our 72 comparisons, with significant negative change in only 1.4 percent (1). In District A, where indices of crime and public violence are midway between B and C, 23 percent (17) of the comparisons (73) are positive and significant. In District B, a largely black and Hispanic inner-city area ... marked by high rates of crime and violence, 14 percent (10) are positive and significant, and 14 percent (10) are negative and significant.

Overall, the positive outcomes were largely attributed to enhanced 'dispute resolution' tactics (p. 15). Differences in outcomes between districts were largely attributed to differences in the policing environments and management support for the project. District C had a relatively low crime environment with strong management support. District A had intermediate crime rates but lacked management support (this point was made despite similar outcomes in C and A). District B was said to have management support but the most difficult environment.

The summary report concluded that there was considerable scope for further reductions in force. It noted that the intervention tended to focus on actions undertaken in the immediate situation where there was potential for violence; when more attention could have been placed on the approach and preparation stages, and on exploiting unassigned patrol time (in terms of police improving relations with their patrol communities). The researchers observed that the relative rarity of violence made officers complacent. Observations also supported the idea that police tended to judge success on the speed with which potentially violent incidents were 'disposed of', when officers could have taken more time and given more thought to their approach (p. 19).

The data collected in the Police Foundation study were later subjected to a regression analysis by Klinger (2010), controlling for variables including race, location and nature of the incident, and including a scale of types of non-lethal force – from 'voice command' (the most commonly used) up to 'choke/baton/hit or kick' (the least commonly used) (p. 102). Klinger concluded that, after attending the Violence Reduction Project training program, officers in the experimental group on averaged used approximately a quarter of one level less force than they did before attending training and compared to their peers in the control group (2010, p. 103).

Klinger also confirmed an implicit finding of the Police Foundation report: that the observations did not indicate a problem of excessive force. Levels of force by both experimental and control groups were deemed appropriate for the circumstances, subject to the finding that the experimental group used 'slightly less force' (p. 106).

3.3. New York Police Department: shootings

The New York City Police Department has been the target of numerous criticisms over shootings of civilians, but it has also received

praise for major reductions in the use of firearms. A 2011 article in *The New York Times* described 'a steep decline in shootings by the police in recent decades'. The article noted that 2010 data revealed record lows and showed 'just how rare shootings have become' (Goldstein, 2011, p. 30). The New York data are particularly useful because they cover four decades going back to 1971. According to the Police Department's *Annual Firearms Discharge Report*, the current program, aimed at assessing and reducing shootings, began in 1969:

More than forty years ago, the New York City Police Department adopted Department Order SOP [Standard Operating Procedure] 9 (s.69) and began to collect in-depth documentation of discharges during hostile encounters, for the stated purpose of '[increasing] the safety potential of each member of the force.' The policy quickly expanded beyond police-involved combat, however, and came to include the study of all firearms discharges by police. Since the early 1970s, the NYPD has endeavored to record and evaluate every instance in which an officer discharges his or her weapon, whether the discharge occurs purposefully, accidentally, or, in rare instances, criminally (New York City Police Department, 2011, p. xi).

Data in the annual discharge reports include the total numbers of shots fired, and resulting injuries and fatalities to citizens and officers, as well as various associated demographic data. The time-series data to 2010 show a general downward trend in 'total shots fired', with peaks of 2510 in 1972 and 1728 in 1995 (p. 43). In the last three years of reporting, from 2008 to 2010, the total number of shots fired averaged 343, representing an 80.1% reduction from the 1995 peak and an 86.3% reduction from the 1972 peak. Fig. 1 shows that the number of persons shot and injured by police declined by 91.8% from a peak of 221 in 1971 to an average of 18 in the last three years of data. Furthermore, the number of persons shot and killed by police declined by 88.1% from a peak of 93 in 1971 to an average of 11 in the last three years of data.

The discharge reports include detailed analyses of the circumstances of shootings involving civilian injuries and deaths (p. 17). In 2010, the 16 cases in which a civilian was injured included 31% in which police were fired on and 57% in which an officer or civilian was threatened with a firearm or 'cutting instrument'. The eight fatalities involved 56% in which the officer was shot at or threatened with a firearm, 22% in which an officer was threatened with a cutting instrument and 11% in which another person was threatened with a 'blunt instrument'.

The declines outlined above were surpassed by trends in officer deaths and injuries (New York City Police Department, 2011, p. 41). The number of officers shot and injured peaked in 1973 at 50 and then declined by 96.8% to an average of 1.6 per year in the final three years of data (2008 to 2010). The number of officers shot and killed peaked in 1971 at 12 and then declined by 100.0% to zero in the last three years.

The NYPD attributes these reductions in large part to the operation of the 'SOP 9 process', outlined above. This involves analyses of the variables and sequences of events associated with each incident, then feeding the findings into improved procedures and training. The most recent report enlarged on the process as follows:

Four decades of annual analyses have altered the way officers respond to, engage in, and even assess the need for firearms discharges. Information gleaned from the annual reports has saved the lives of citizens and officers alike, and there has been Department-wide change—tactical, strategic, and cultural—with regard to how officers use and control their firearms. The Department has made restraint the norm.

Today, the reports serve an additional but equally important role: they are statistical engines for the development of training, the adoption of new technologies, and even the deployment of Department

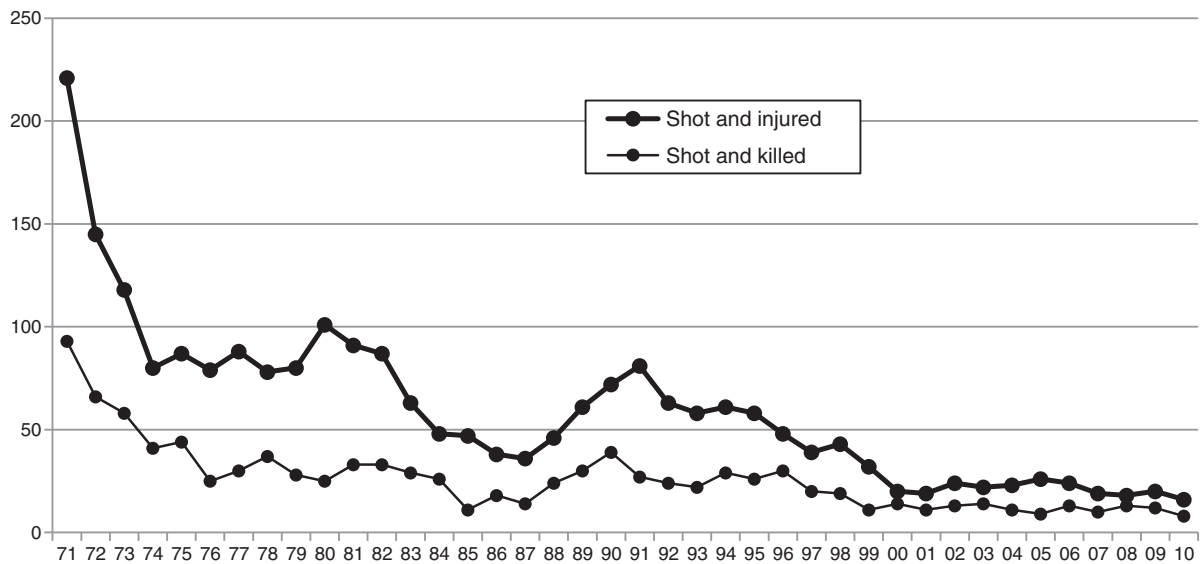


Fig. 1. New York City Police Department, 'subjects shot and injured' and 'subjects shot and killed', 1971–2010. Source: *New York City Police Department* (2011, p. 42).

assets. New instructional scenarios are implemented from these reports, new hardware—from bullet-resistant vests to speed loaders to semiautomatic handguns to conducted-energy devices—is introduced.

Tracking how, when, where, and why officers discharge their weapons is an invaluable tool for working towards the Department's ultimate goal of guaranteeing that, for every discharge, no option exists other than the use of a firearm (*New York City Police Department, 2011, p. xi*).

The discharge reports are built on investigations of each incident, subject to strict procedures, focused on issues of officer culpability as well as lessons to be learnt (p. xxi–xxiii). Locations where shootings occur are preserved and forensically examined. An investigative 'shooting team' consults with the District Attorney and produces a series of draft reports that pass through a Borough Firearms Discharge Advisory Board to a Chief of Department's Firearms Advisory Review Board and on to the Police Commissioner for finalization.

The reductions in shootings have also been specifically attributed to tightened rules, originally introduced in 1972 in response to unacceptably high levels of firearms incidents (*RAND, 2008, p. 11*) (note that reducing crime rates are also probably a factor; see *Fyfe, 1978*). The 1972 guidelines limited justifiable deadly force, required investigations of all firearm discharges, and required disciplinary action for breaches of the guidelines. The 2010 *Annual Firearms Discharge Report* purports to provide a summary of current policy and training. The policy emphasizes the importance of protecting life. Deadly force is only acceptable when there is a clear threat to the safety of an officer or civilian. The report emphasizes a 'shoot to stop' goal, not a 'shoot to kill' goal, when shooting is deemed necessary; while also describing the emphasis in training on shooting at the center mass of a body to ensure maximum incapacitation (*New York City Police Department, 2011, pp. 44 & 46*). Officers who discharge their firearm are also required to attend a refresher course (p. 18). However, beyond this, there is very little in the discharge reports that are enlightening as to the changed, and changing, procedures that led to the reductions in shootings.

Despite these many achievements, police use of firearms in New York City continues to attract controversy. The New York Civil Liberties Union has been particularly critical of limited disclosure by the

Department, including having not made discharge reports publicly available and dropping the race of intended targets from reports in the late-1990s. The Union alleged there is a 'widespread belief that blacks are a target for the police' (*New York Civil Liberties Union, 2008, p. 1*). Earlier reports indicated that 57.5% of persons shot at were Black, 31.9% Hispanic and 7.9% White (p. 2). Concerns have also been raised about 'the high proportion of shooting incidents in which police officers are the only ones firing weapons (77% of the time)' (p. 2). In 2009, the City Council required the Department to publish detailed reports, but the race of persons shot at is still not included (*Council of the City Of New York, 2009; New York City Police Department, 2011*).

Aspects of NYPD's firearms policy and training were also questioned in a review by *RAND (2008)*. The review recommended more scenario-based experiences, much more rigorous testing in both pre-service and refresher training, and more practice in corrected techniques. *RAND* also recommended a trial of CEWs as a likely better alternative to both firearms and OC spray; along with the investigation of laser-sighting and flashlight mounted weapons. It recommended the introduction of 'reflexive-shooting scenarios in which a stimulus or the sounds of guns going off are included, to sensitize officers to cues that may not be reliable and to teach them that such cues may generate unwanted responses' (2008, p. xxiv). *RAND* also recommended more complex analyses of incidents, including greater consideration of alternative responses.

3.4. Portland Police Bureau (Oregon): shootings and use of force

The 1990s saw considerable controversy over police shootings and allegations of excessive force in the Portland Police Bureau. Increasing concerns were also expressed about the adequacy of oversight arrangements. 'The Police Accountability Campaign 2000', involving community and civil liberties groups, led to the opening, in 2002, of the *Independent Police Review Division (2004, p. 147ff)* (IPR) within the City Audit Bureau. The Division has independent investigative powers and holds a mission to contribute to improved practice. It appears that the establishment of the IPR stimulated an initial increase in complaints before a long-term decline set in. The increase has been explained in terms of improved public confidence in the complaints process and also a spike in

complaints related to Iraq War protests in 2003 (*Independent Police Review Division, 2004*).

Efforts to reduced police use of force devolved into two overlapping projects, one focused on ‘Officer-involved shootings’ and another concerned with broader force issues. In relation to shootings, in 2003 the IPR engaged the independent Police Assessment Resource Centre (PARC) to assess shooting incidents across the period 1997 to mid-2000. The PARC report found that:

Some of the 32 incidents demonstrated exemplary tactics and leadership; many demonstrated flaws in supervision, incident management, and field tactics that unnecessarily exposed officers to harm and increased the likelihood that they would need to use deadly force to defend themselves (*PARC, 2003, p. 2*).

PARC recommended the introduction of mandatory Use of Force Reports, to be completed by officers at the end of each shift. In relation to operational tactics, PARC also recommended raising the threshold for justifiable use of deadly force against felons. It sought to disallow the shooting of fleeing felons except in cases related to serious injury or death or where the suspect posed a risk of serious injury or loss of life – but subject to consideration of alternative means of apprehension and risks to the public (2003, p. 42). A number of other recommendations were made, including making improvements to policy and tactics based on analysis of the Use of Force Reports.

Follow up assessments have been very positive about reform. The 2009 assessment stated that:

This Report describes an increasingly excellent police department. Chief Rosanne Sizer and her command staff have worked diligently and in good faith to improve the Portland Police Bureau (‘PPB’ or ‘Bureau’). To the extent this has meant implementation of the Police Assessment Resource Center (‘PARC’) recommendations, the Chief has done so effectively and with seriousness of purpose. Importantly, the current administration has built upon PARC’s recommendations and developed first-rate new policies. The PPB is indeed in a progressive mode, with an increased capacity for self-critical identification of issues and formulation of solutions. We conclude that the PPB has made substantial progress since we first looked at it in 2002 and 2003 (*PARC, 2009, p.1*).

PARC was particularly impressed by the work of a new Use of Force Review Board, ‘which provides the Bureau with an effective and credible review process to identify and learn the appropriate lessons from officer-involved shooting ... incidents’ (*PARC, 2006, pp. 1–2*). It also cited the ‘mutually respectful and productive’ working relationship between the Police Bureau and the IPR (2009, p. 3). Notable improvements included a revised force policy emphasizing minimum force. It was unclear from the report how this translated into recruit training but there appeared to be significant improvements in critical incident training for field supervisors and in procedural changes in high-risk situations such as vehicle stops and pursuits. The primary theme was one of much greater caution in the approach taken by officers. The IPR annual reports have tracked officer-involved shootings from 1997 – although without breaking down the data in terms of injuries and fatalities. *Fig. 2* shows some fluctuations but with an overall downward trend from a high of 10 in 1998 and 1999 down to one in 2009, but with an upswing to six in 2010. It was too early for assessments of the 2010 incidents to be completed.

It is possible that the above initiatives, focused on police shootings, fed into initial declines in complaints about excessive force (*Fig. 3*). Efforts to address wider use of force issues were stepped up through the creation of a Force Task Force in 2006, consisting of representatives of the Police Bureau, the IPR and the volunteer-based Citizen Review Committee. The Force Task Force was charged with analyzing use of force data in order to ‘develop recommendations for the Chief of Police designed to improve the Bureau’s management of force and reduce

the number of public complaints involving force’ (*Force Task Force, 2007, p. 1*). The main data source was the Use of Force Reports, introduced in 2004. One of the findings was that between 2004 and 2006 not one citizen complaint regarding excessive force was sustained by the Bureau (p. 8). This was set against a national average of 8–14%. The deficit was in part attributed to an overly discretionary policy on force and possible inadequate standards regarding acceptable force levels. The Task Force made 16 recommendations, including the following (2007, pp. 17–19):

- a requirement that officers provide a justification for force on the report,
- supervisor assessment of all reports for completeness and validity,
- mandated reporting of violations of policy,
- the force policy be tightened to include clearer standards and expectations,
- more attention in the policy to reducing officer provocations,
- misconduct investigations include a longer ranger assessment of the circumstances leading to incidents related to complaints,
- all force complaints entail a debriefing with the subject officer,
- lowering the threshold for early intervention, and
- a review be conducted of street policing strategies in the two precincts with the highest use of force ratios – Central Precinct and the Transit Police Division.

A 2009 follow up assessment found that all 16 recommendations had been implemented to a substantial extent (*Force Task Force, 2009*). The average number of use of force reports declined on an annualized basis by approximately 35.3% between the two assessments, from 2113.4 in the 2007 report to 1366.0 in the 2009 report (p. 14). Excessive force complaints fell from 88 in the year 2006 to 74 in 2007 and 50 in 2008. *Fig. 3*, updated from a 2011 IPR report, shows that there has been an overall decline of 64.4% in complaints of excessive force from a peak of 118 in 2004 to 42 in 2010. The Force Task Force report also found that citizen injuries fell from 732 in 2006–07 to 626 in 2007–08 and 595 in 2008–09 (–18.7%) (p. 18). Officer injuries fell from 234 in 2006–07 to 214 in 2007–08 and 180 in 2008–09 (–23.0%) (p. 17). The report noted a slight increase in the sustained rate for complaints. It also commended reductions in force in the Central Precinct and Transit Police, including reduced use of Tasers and reduced use of force complaints.

3.5. Tasmania Police: excessive force complaints

The Tasmania Police reported large reductions in citizen complaints from the latter part of the 1990s. The case was investigated by *Porter, Prenzler, and Fleming (2012)*, who analyzed all aspects of the complaints process using interviews, reports and complaints data. ‘Complaints against police’ from members of the public (other than minor customer service complaints) trended upwards from 1994–95 to 1996–97, followed by a long-term decline. In terms of a rate, there was an 87.1% fall in public complaints against police over 13 years from a high of 23.3 per 100 officers in 1996–97 to a low of 3.0 per 100 officers in 2008–09. As shown in *Fig. 4*, the rate of assault allegations increased from 8.3 per 100 officers in 1994–05 to a peak of 11.6 in 1999–00 and then declined by 77.8% to 2.6 in 2008–09. Excessive force allegations increased from 0.4 in 1994–95 to a peak of 7.5 in 2002–03 and then declined by 50.6% to 3.7 in 2008–09. Combined assault and excessive force allegations peaked at 194 in 1999–00 and then declined by 58.7% to 80 in 2008–09. The equivalent data as a rate showed a 62.9% decline from 17.0 allegations per 100 officers to 6.3.

The researchers found that the declines were plausibly attributable to a variety of innovations, which had a cumulative effect. Complaints data from the seven other police departments served as proxy controls. These showed a variety of trends but none with reductions of such depth or longevity as those in Tasmania. One possible explanation for any reductions in complaints is that police deflect complainants or

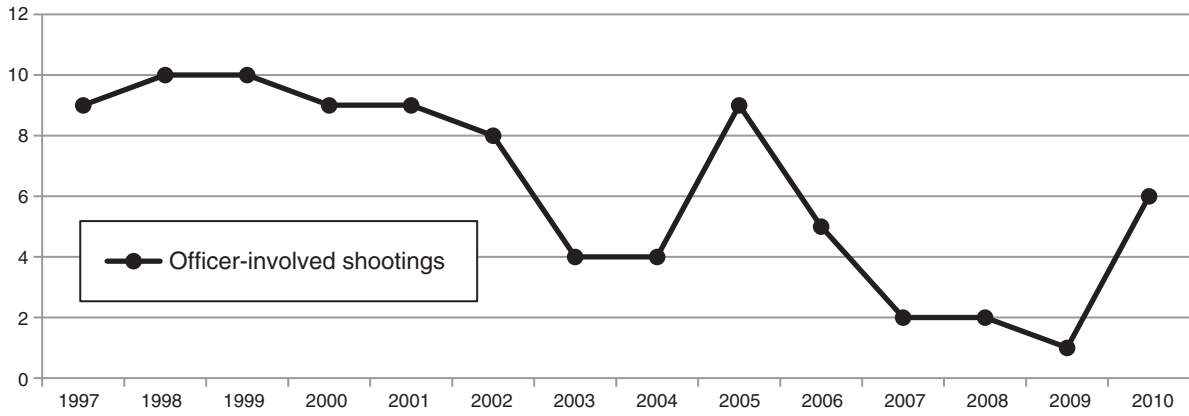


Fig. 2. Portland Police Bureau, 'officer-involved shootings', 1997–2010. Sources: Independent Police Review Division (2008, p. 27, 2011, p. 19).

under-report complaints. A source of experimental control in this regard was the presence of the Tasmanian Ombudsman, who could accept complaints and also review appeals from persons unhappy with how police handled their complaint. The Ombudsman reported no concerns with police complaint processes and noted decreasing numbers of complaints made directly to his office. Another possible explanation for reduced complaints is that officers are less assertive in their conduct. However, the study also showed that there were large increases in police enforcement activity in the period.

Innovations by the Tasmania Police related to complaints, and to police conduct and procedures, occurred across several domains. Commissioner Richard McCready instituted a professionalism agenda in 1996, and innovation occurred during the long-term tenure of the one Internal Investigations Unit (IIU) Commander. The Commander made it a personal mission to address the problem of high and increasing complaints, and his approach was informed by academic research and participation in the Australian Police Integrity Forums – where police leaders shared their experiences about conduct issues.

In 1998, the Force introduced a Job Suitability Test, focused on screening out unsuitable applicants. This was followed by a major shift

in training from a short form of defensive tactics to a longer training regime focused on de-escalation and injury reduction. The early-2000s then saw the introduction of an Early Intervention System to analyze complaint patterns and identify officers with multiple complaints. From 2003–04, IIU began providing District Commanders with profiles of officers attracting multiple complaints with a view to closer supervision. Officers who engaged in repeated breaches of standards were also 'paraded' before the Deputy Commissioner – a practice which strongly reinforced organizational messages about lack of tolerance for unethical conduct. A general decrease in multiple complaints occurred from 1999–00.

Complaint handling was also made more rigorous, with improved training for investigators and the retention of experienced investigators. The rate of sustained complaints increased from a low of 6.5% in 1997–98 to an average 37.9% across the last five years of data from 2004–05 to 2008–09. In addition, the rate of internally generated complaints increased from a low of 0.38 per 100 officers in 1995–96 to a high of 2.57 in 2005–06, followed by a fluctuating but relatively high rate. The sustained rate for internal complaints was also relatively high around 80–90% from 2003–04. There was also a focus on learning

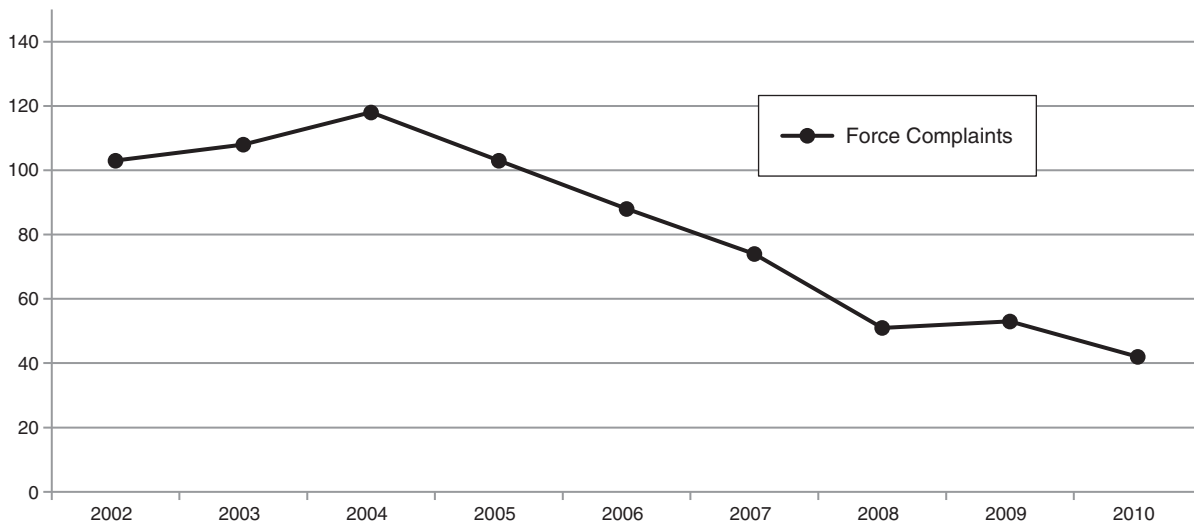


Fig. 3. Portland Police Bureau, 'force complaints', 2002–2010. Note: A full breakdown is not available, but it appears the large majority of complaints were from citizens; while a small number were registered internally or made by the Independent Police Review (IPR). Sources: Force Task Force (2009, p. 15); Independent Police Review Division (2011, p. 18).

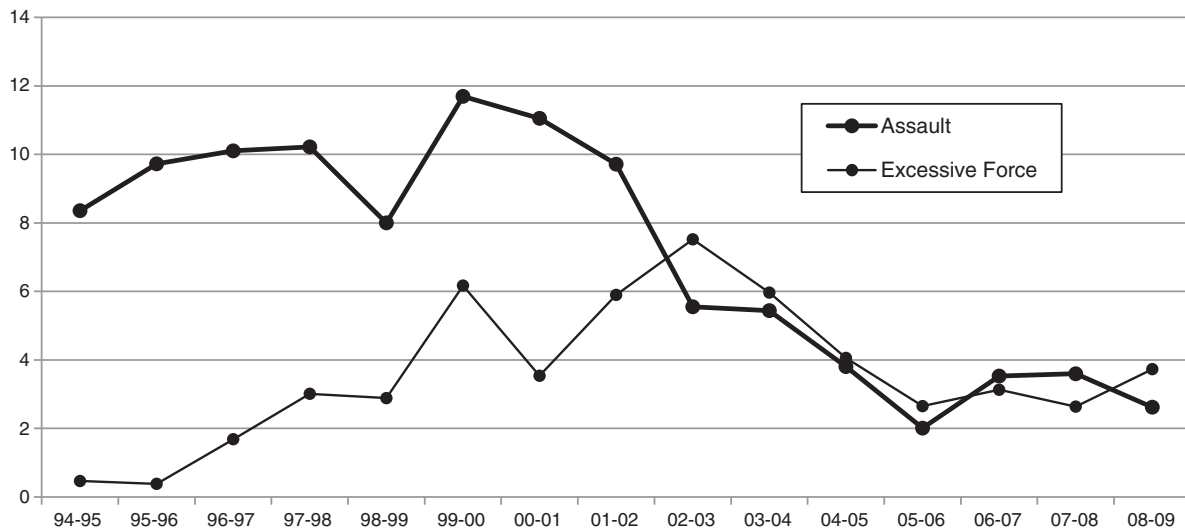


Fig. 4. Tasmania Police, 'assault' and 'excessive force' allegations per 100 officers, 1994-95–2008-09. Source: Adapted from Porter et al. (2012, p. 10).

lessons from complaints, as opposed to simply determining culpability and apportioning sanctions. Officers were at times assigned to retraining.

The complaints analysis process included attention to trends, including, for example, the growing problem with assault and excessive force complaints shown in Fig. 4. These findings were relayed to District Commanders and to the Academy. Examples of specific findings included allegations of overly tight handcuffs, head restraints, and a ground hold involving kneeling suspects. These issues were addressed through changes in procedures and training. A major upgrade was made to Operational Skills and Tactics training in 2003, which can be related to reductions in excessive force allegations and continued reductions in assault allegations from that time (Fig. 4). Role-playing was introduced; along with increased attention to negotiation and communication skills, de-escalation techniques (based on a force continuum), 'stress inoculation', team tactics, and body language. The validity of training was enhanced through greater use of real-world simulations and videotaping. Instructors and trainees discussed video content, with a focus on both accounting for decisions and considering alternatives.

3.6. Victoria Police (Australia): Project Beacon and fatal shootings

In the mid-1990s an upsurge in fatal shootings by police in Victoria created widespread controversy that led to the launch of Project Beacon. The crisis in the 1990s followed on the heels of a similar crisis in the 1980s. Fig. 5 shows that fatal shootings by Victorian police increased in the 1980s to a peak of six in 1988. This was attributed to a break out in urban warfare between police and criminals. Fatal attacks on police, including the bombing of a police station, generated 'a heightened sense of vulnerability amongst police' (Victoria Police, 1995, p. 1). In response to the problem, police introduced improved training in 'methods of controlling violent criminals [with] a strong focus on firearms and defensive physical tactics' (Office of Police Integrity, 2005, pp. i-ii). This appeared to have a positive effect, with fatal shootings declining to between one and two per year up to 1993. There was then a sharp increase to nine fatalities in 1994. Across the decades, 'Victorian police were killing citizens at a greater rate than any other in the country' (Silvester, 2012, p. 24). The state force had a reputation for being 'trigger-happy'

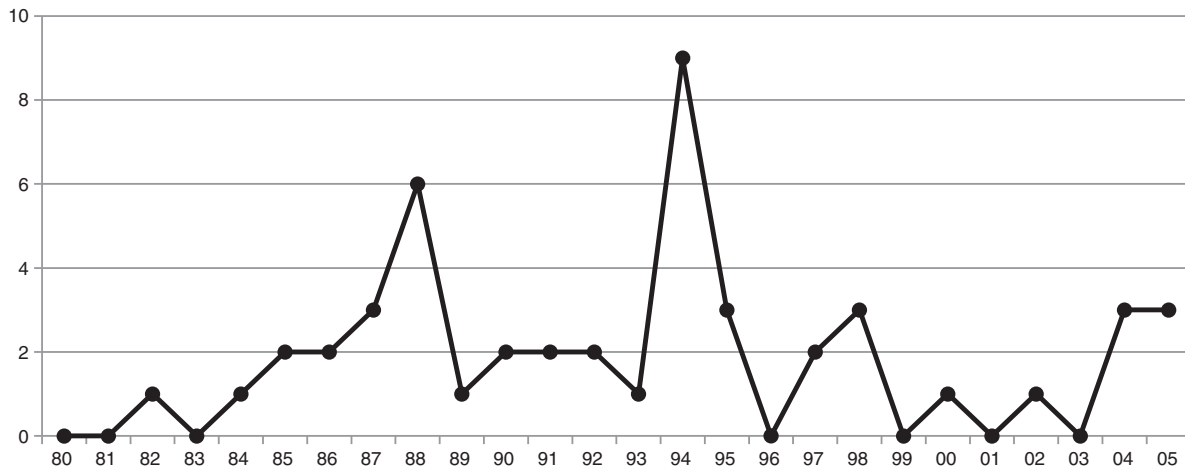


Fig. 5. Victoria Police, fatal shootings, 1980–2005. Source: Office of Police Integrity (2005, p. 65).

and dominated by a culture 'overly reliant on firearms' (Office of Police Integrity, 2005, p. i; Silvester, 2012, p. 24).

The second upsurge in fatalities was attributed, in significant part, to police shootings of mentally ill persons displaying aggressive behaviors in public. This, in turn, was partly related to the implementation of a de-institutionalization policy (Victoria Police, 1995, p. 1). Five reviews of the shootings, two internal and three external, resulted in 219 recommendations. The reviews included a Coronial Inquiry, a report by the National Police Research Unit (1998), police focus groups and a police survey. Input was also included from officers involved in 22 fatal incidents.

The reviews were used to inform a training-based intervention – Project Beacon – introduced in September 1994. Project Beacon developed a 'safety first' philosophy, widely disseminated through police internal communications channels, based on 'ten safety principles' (p. 2):

1. Safety first – the safety of police, the public and offenders or suspects is paramount.
2. Risk assessment – is to be applied to all incidents and operations.
3. Take charge – exercise effective command and control.
4. Planned response – take every opportunity to convert an unplanned response into a planned operation.
5. Cordon and containment – unless impractical, adopt a 'cordon and containment' approach.
6. Avoid confrontation – a violent confrontation is to be avoided.
7. Avoid force – the use of force is to be avoided.
8. Minimum force – where use of force cannot be avoided, only use the minimum amount reasonably necessary.
9. Forced entry searches – are to be used only as a last resort.
10. Resources – it is accepted that the 'safety first' principle may require the deployment of more resources, more complex planning and more time to complete. (Office of Police Integrity, 2005, pp. 3–4).

All operational officers who carried firearms were required to undertake a five-day Operational Safety and Training Tactics (OSTT) course. This involved 250 trainers, 31 training centers, and 8657 trainees, from December 1994 to March 1995. The OSTT course was described as follows:

The main feature that differentiates OSTT from previous police training programs, and the feature which makes it unique in Australia, is the balance between *Communication and Conflict Resolution* components, *Firearms Qualification* practice, and *Defensive Tactics and*

Scenario training, which are combined into one integrated course. The courses deliberately incorporate mixed classes of students from all ranks, roles and functions to 'cross-pollinate' ideas and experiences.

Most other training courses focus on the use of weapons or on defensive tactics, but offer no options for non-forceful resolution of violent (or potentially violent) situations. Similarly, most existing courses in *Conflict Resolution and Communication* do not deal with situations that have escalated to violent confrontations.

Additionally, OST training provides police with a much greater awareness of appropriate methods for dealing with mentally disordered persons, and the roles of other organizations whose activities can assist police in successfully resolving incidents (Victoria Police, 1995, p. 5).

An inspector was appointed in each police district to liaise with Crisis Assessment Teams (CATs) and interdepartmental relations were monitored through a Victoria Police/Psychiatric Services liaison committee. Project Beacon also included two days of refresher training every six months; the introduction of OC spray; and the introduction of a Use of Force Register, designed for monitoring the impact of the project.

Following the roll out of Beacon, fatal shootings fell by 91.1% from the peak of nine in 1994 to an average of 0.8 per year over the eight years from 1996 to 2003. This trend can be seen in Fig. 6 in comparison to fatal shootings by police in all other jurisdictions in Australia for the 15 years from 1990 to 2004. Deaths in Victoria exceeded those in the other jurisdictions prior to Beacon, then fell well below the combined total in the seven other jurisdictions. The overall downward trend in Victoria then came to a halt, with three fatal shootings in 2004 – and another three in 2005 (Fig. 5). This prompted a review by the newly formed Office of Police Integrity, which found that:

It appears that Victoria Police has lost some of the strategic focus on safety and avoiding the use of force which it developed during Project Beacon... The result is a lack of effective risk management, a culture in which self-assessment, review and improvement are given insufficient attention, and a diminution of essential police training (2005, p. 55).

One journalist provided a more blunt account: '(Project Beacon) was an outstanding success, so naturally police scrapped it' (Silvester, 2012, p. 3). The main explanations provided for the reduction were the cost of

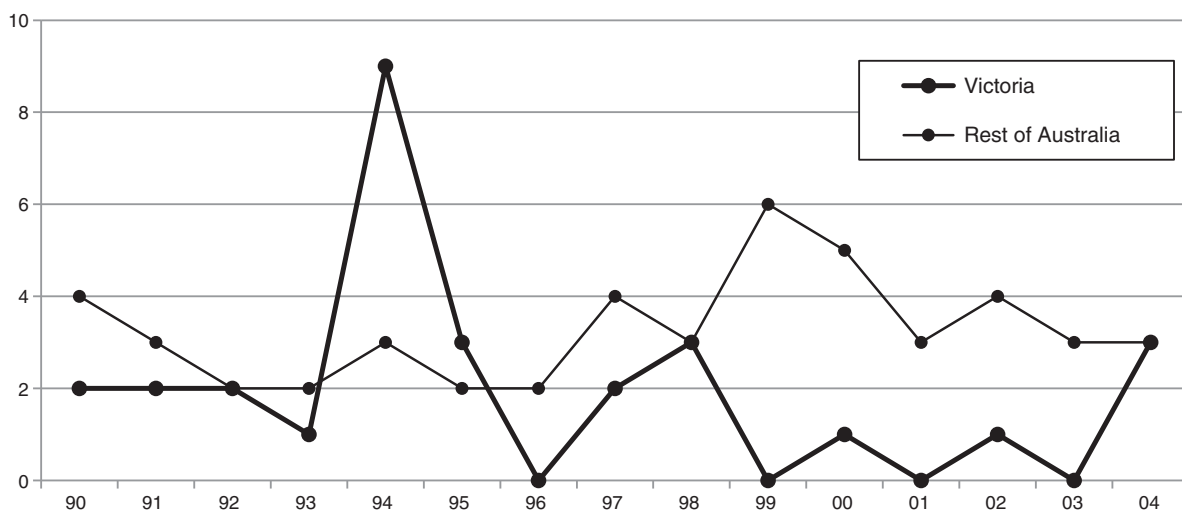


Fig. 6. Victoria Police and all other Australian jurisdictions*, fatal shootings, 1990–2004. *New SouthWales, Queensland, Northern Territory, Western Australia, South Australia, Tasmania and the Australian Federal Police. Source: Office of Police Integrity (2005, p. 63).

training and the need to get new officers on the street sooner: ‘Dumping Beacon effectively produced an extra 16,000 operational shifts but left police undertrained to deal with disturbed offenders’ (Silvester & Rule, 2010, p. 2). Police also conceded, in 2012, that ‘we took our eyes off the ball’ (in Silvester, 2012, p. 24). While training in dealing with the mentally ill has reportedly improved, there appears to be no systematic on-going monitoring of police shootings (see Silvester, 2012). In 2011, a professor described the Victoria Police approach as ‘Shoot first, spin later’ (Norden, 2011). The post-Beacon deaths have also been associated with the refusal of Victoria police to equip operational police with CEWs (Dalton, 1998; Office of Police Integrity, 2005).

3.7. England and Wales: deaths in police custody

In England and Wales, fatalities associated with police actions are monitored by the Independent Police Complaints Commission (IPCC), established in 2004. In 2010 the Commission published a major review of ‘deaths in or following police custody’. These incidents were defined as:

Deaths of persons who have been arrested or otherwise detained by the police. It includes deaths which occur whilst a person is being arrested or taken into detention. The death may have taken place on police, private or medical premises, in a public place or in a police or other vehicle (Independent Police Complaints Commission, 2010, p. 9).

The review covered 333 cases over an 11-year period. It found that deaths in this category decreased by 69.3% from 49 in 1998–99 to 15 in 2008–09 (see Fig. 7). This entailed a 72.2% fall in the rate of deaths ‘per 100,000 notifiable arrests’, from 3.6 to 1.0 (2010, p. 11). Within these data, three of the four ‘main primary causes of death’ showed long-term declines (p. 17). Suicides in police custody fell from 15 in 1998–99 to an average of 1.2 in the last four years of data. ‘Accidental overdoses’ fell from a peak of 10 in 2001–02 to one in 2008–09, while deaths from ‘injuries received prior to detention’ fell from a peak of seven in 1999–00 to one in 2008–09. Deaths from ‘natural causes’ increased to 13 in 2002–03 and stayed around that number until falling sharply to a low of five in 2008–09. Natural causes, however, remained the main cause of death over the period, accounting for 31.2% of deaths. Natural causes include organ failure, asphyxia, and hyperthermia; and are often associated with ‘secondary causes’ such as intoxication from alcohol or drugs or both.

The reductions in deaths were attributed to a variety of changes in police procedures. In relation to suicides, the report cited improvements in cell design, including fewer points where inmates could hang themselves. A number of other changes were likely to have had impacts across categories. There was an increase in police taking persons directly to hospital instead of the watchhouse, and custody sergeants were taking more action to address detainee health issues at the time of admission. The establishment of a custody visitor scheme was also seen as contributing to compliance with duty of care requirements. There was an overall enlargement of risk management procedures — including initial assessments of detainees and closer monitoring.

The precise background to these changes was difficult to identify, although reference was made by the IPCC to changes in laws and guidelines (Independent Police Complaints Commission, 2010, pp. 1–2):

Detention (in a police station) is governed by PACE [Police and Criminal Evidence Act 1984] Code of Practice C. The Code of Practice has been amended several times (most recently in 2008), with the most significant changes occurring in 2003 when major changes were made to help strengthen the risk assessment of detainees. In addition to the statutory Code of Practice, ACPO [Association of Chief Police Officers] issued guidance (2006) to officers to help ensure the safe detention and handling of people in police custody.

Finally, in relation to the use of police custody as a place of safety under Section 136 of the Mental Health Act 1983, there have been Home Office Circulars and Department of Health (2008) Codes of Practice which, since 1990, have stated that a place of safety should ideally be a hospital. More recently this has been strengthened to suggest that police custody should only be used as a place of safety in exceptional circumstances.

The Commission’s report included 10 recommendations to advance prevention. It noted that improvements in procedures had not been consistently implemented, and there was an ongoing problem in many police forces with inadequate risk assessments and inadequate monitoring of detainees. Key recommendations included greater rigor in initial assessments, with greater attention to the way in which intoxication can mask head injuries; a requirement that monitoring includes properly rousing persons; more rigor in the frequency and consistency of checks, and recording of checks; and ensuring quality CCTV in at least one cell per suite of cells. The recommendations also included a pilot of specialized facilities for detained persons requiring medical observation. The IPCC’s monitoring program includes annual reports with

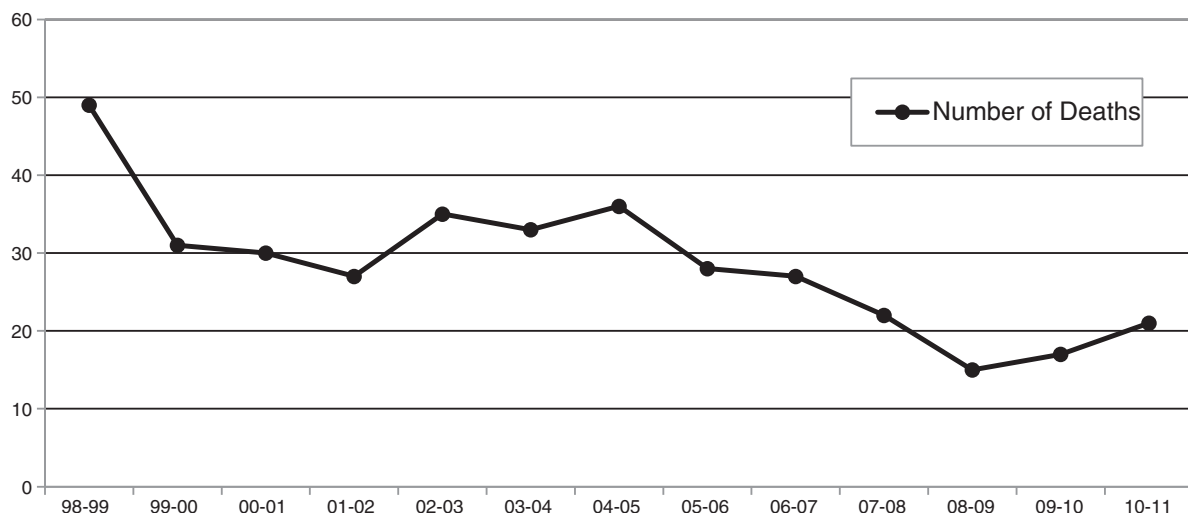


Fig. 7. England and Wales, ‘deaths in or following police custody’, 1998–99 to 2010–11. Sources: Independent Police Complaints Commission (2011, p. 11, 2011b, p. 7).

statistics and analyses of deaths in or following custody. As Fig. 7 shows, the final year of the Commission's major study was a low point for incidents. Subsequent reports showed an increase from 15 deaths in 2008–09 to 17 in 2009–10 and 21 in 2010–11. The large majority of these deaths were from natural causes, with little provided by the reports in terms of prevention implications. A statement was made that 'The IPCC is working with other policing organizations to progress the recommendations... It will continue to monitor such deaths in order to identify further lessons' (2011, p. 8).

4. Discussion

This paper identified seven case studies in the policing literature demonstrating that substantial reductions can be made in police use of force and harms associated with force. There was evidence that reductions in use of force were positively correlated with reductions in adverse consequences of force for both citizens and officers – as measured by fatalities, injuries and complaints. This latter finding was especially strong in relation to officer safety in the New York case. While not specifically designed to test explanations of police use of force (or excessive force), the case studies showed evidence for the effectiveness of a range of interventions that can be linked to individual, cultural and organizational explanations, as outlined by [Lersch and Mieczkowski \(2005\)](#). The prospects for other departments reducing force are therefore good, subject to a number of qualifications.

4.1. Individual strategies

[Lersch and Mieczkowski \(2005\)](#) discuss individual-level explanations for excessive force, where problem behavior is thought to be the product of individual 'rotten apples'. While not drawing explicit links to this theory, they present early warning systems as an option for targeting individual officers subject to a pattern of indicators of poor behavior, such as multiple citizen complaints. The present study found evidence to support the effectiveness of such systems in reducing use of force, particularly in the Oakland and Tasmania case studies. These studies note identification of officers who were involved in higher than average numbers of violent confrontations or who received higher numbers of complaints for assault. While the targeting of individual officers has the potential to highlight individual blame and poor performance records, early warning systems are increasingly designed with remedial measures in mind ([Porter & Prenzler, 2012](#)). Indeed, the application of early intervention systems that target officers with multiple force complaints or force reports can be sold as a means of saving officers from career-damaging reviews ([Porter et al., 2012](#); see also [PERF, 2011](#)).

This also raises the issue of appropriate police accountability and discipline. Problems of excessive force have been closely associated with poor discipline, especially in relation to police handling of complaints. There was some indication in the Tasmanian study that increased complaint substantiation rates were associated with reduced complaints of assault or excessive force, as well as more, and more varied, disciplinary outcomes. The jury is probably still out on this issue, but it would certainly seem to be the case that closer scrutiny and management of officers, especially those with multiple force complaints, is essential for reducing inappropriate force.

4.2. Cultural strategies

Cultural explanations for police behavior highlight the influence of cultural norms and expectations. Police culture has been highlighted as promoting feelings of division and isolation from wider society due to their powers and duties. Relevant to this, [Lersch and Mieczkowski \(2005\)](#) discuss how community policing and civilian review boards can create higher levels of accountability, as well as confront inappropriate cultural norms.

Some projects reviewed here appear to have benefitted greatly from the involvement of external research agencies – although this is not an essential requirement nor a guarantee of success. The Portland case, for example, highlighted the role of the Police Assessment Resource Centre (PARC) in providing informed input and independent assessments. However, PARC's work with the Los Angeles County Sheriff has not so far led to major improvements in force indicators ([PARC, 2012](#)). The Portland case also demonstrated the positive influence of the police oversight body, the Independent Police Review Division. But, in many other cases, oversight agencies struggle to have any positive impact on police use of force ([Human Rights Watch, 1998](#); [O'Hara, 2005](#)).

While no study reported a specific adoption of community policing, there was evidence that training officers in communication skills for dealing with members of the public was beneficial. Overall, training was a major area of focus in the case studies, especially for transmitting modified policies and procedures. No one training program stood out, but areas of development were centered around what is often referred to as 'verbal judo' – including communication skills, diffusing conflict, stress inoculation, low impact physical restraint techniques, and conducting risk assessments. The use of simulations also appears to be important – most notably in the Metro-Dade and Tasmania cases – along with videorecording of role plays, and discussions of recordings that include justifications of decisions and consideration of alternatives. While training serves to educate recruits and set initial norms, socialization in the first years of service can be a more powerful influence. Training, therefore, needs to be reinforced on the job, with close supervisor involvement in use of force issues, including being held accountable for the implementation of policies. Refresher training for serving officers also featured in some of the case studies.

4.3. Organizational strategies

Organizational theories of police behavior include factors in the immediate organizational environment, including policies, practices and supervision. [Lersch and Mieczkowski \(2005\)](#) discuss the importance of mechanisms of internal control of organizations to regulate the behavior of police officers. Revision – or 'tightening' – of policies featured prominently in the case studies. Policies need to be explicit about what is required of officers in different situations; and policies need to be written down, regularly reviewed and updated where appropriate. More generally, an enhanced accountability framework appears to be essential for reducing force. In that regard, the introduction of use of force reports is a major innovation. The value of these reports is enhanced through compulsory inclusion of justifications, supervisor sign off, and discussions between officers and supervisors.

Use of force reports also need to be analyzed in-depth, and it is essential that the findings are reported publicly on an annual basis along with all other force measures. Police management systems should have sufficient lines of communication open to respond to problems as they arise. For example, the Tasmanian case study showed how problems identified by the Internal Investigations Unit, through routine complaint analyses, could be addressed rapidly through communication with trainers and operational managers. Periodic in-depth studies on specific use of force topics are also likely to identify areas that need improvement, leading to concrete recommendations. The extent to which departments implement recommendations also needs to be assessed and publicly reported.

4.4. Practical considerations for intervention

A key step identified in the cases studies involves initial diagnosis of the nature and causes of excessive or unnecessary force within a standard Problem Oriented Policing framework ([Goldstein, 1990](#)). This entails research, using quantitative indicators – such as fatalities, injuries, complaints and use of force reports – along with qualitative sources – such as investigative reports, coroner reports, and police officer interviews

and focus groups. The findings should be used to develop site-specific, tailor-made, interventions; which can be modified depending on the findings from the post-intervention data.

One of the most important lessons from the case studies is that an explicit commitment to improving police conduct is an essential first step in making improvements. Another key lesson, closely linked to this, is that innovation requires progressive leadership to marshal support, direct resources, and bring in the right personnel. A related lesson is that resistance should be expected. Factoring in opposition is essential for a planned approach likely to have maximum impact. Attempts to minimize force and, especially, to reduce excessive force and risky behaviors, entail reducing officer discretion in dealing with suspects according to personal preferences – including the freedom to mete out ‘street justice’. This requires tact and tenacity by leaders in managing resistance without alienating operational staff.

4.5. Limitations and further research

A strong note of caution should be sounded about the implications of this study for replications. Many factors are at work in any attempt to introduce sustained reform in police use of force and there is no guarantee that any of the methods outlined above will be successful in other contexts. For example, Toch and Grant reported on an attempt to replicate the Oakland intervention in Kansas. The result was described as a failure. The review panels became ‘directive, hortatory, and confrontational [and] evidence of behavior change was not forthcoming’ (2005, p. 242). Other elements in the case studies that appear to have been influential have also shown little or no impact in other contexts. Overall then, an approach of cautious optimism is required – one that recognizes that there are powerful forces of resistance, or simply forces of disinterest, that can subvert the best reform package. Careful attention to the politics of project implementation is essential.

The case studies were also problematic in terms of evaluation methods. None involved a comprehensive set of long-term measures, and only one (Metro-Dade) involved a proper control group. This situation was not, however, considered fatal to the task of evaluation. Most of the case studies are best considered as ‘natural experiments’, and are worthwhile evaluating retrospectively for the lessons they provide. When police leaders decide to take action against a problem, they may need to introduce changes across a whole department and it is often not possible for them to construct control groups – if they are even aware of scientific standards. Researchers can, nonetheless, construct various controls that help to identify probable impacts of interventions and screen out alternative explanations for changes. It is also the case that the findings associating interventions with desirable changes are strengthened by the adoption of multiple measures, and the majority of the case studies reported here included more than one measure.

The point should also be made that this study was restricted to the lessons from intervention studies. In seeking to reduce unnecessary force, the findings from other studies should also be considered. As noted in the literature review, these include the employment of better educated officers and more female officers; and the adoption of less-than-lethal technologies, such as OC spray and CEWs, subject to proper training and retraining policies. There are also a number of promising innovations that require more research. These include the use of recording devices, including CCTV in police watchhouses and interview rooms, and the use of vehicle and body mounted cameras (Porter & Prenzler, 2012). Recordings can be useful to both deter and identify excessive force, but can also assist in countering false allegations of excessive force.

5. Conclusion

This review paper provided in-depth analyses of a range of case studies involving interventions to reduce police use of force, with a focus on excessive force or adverse impacts. The case studies involved a variety of

types of interventions, and combinations of interventions, and a variety of forms of measurement of impacts. Overall, equipping officers at the individual level with the appropriate skills, and providing a framework of internal and external accountability, seemed to be the keys to reducing negative behavior and outcomes. While the evaluations tended to be limited because of inadequate data or information, there was sufficient evidence to show that positive effects have been achieved; and various strategies show promise for application in other locations. The prospects for wider reductions in police use of force are fairly good, subject to genuine commitment from police leaders.

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