

What is Known About the Effectiveness of Police Practices in Reducing Crime and Disorder?

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Abstract

We build upon previous reviews of the police effectiveness literature to categorize strategies and tactics based on what police should and should not be doing. We also provide relevant information on what police agencies should be doing to implement effective strategies. We argue police should be focusing on hot spots policing, problem-oriented policing (POP), focused deterrence approaches, directed patrol to reduce gun crime, and using DNA in property cases. Police should also recognize the importance of efforts to enhance legitimacy. In contrast, police should be avoiding standard policing tactics such as random preventive patrol, second responder programs, and Drug Abuse Resistance Education (D.A.R.E.). We discuss how well current policing practices match up with effective approaches, describe general implications for policing, and conclude by noting policing strategies which we know too little about to make informed recommendations.

Keywords

police effectiveness, crime reduction, what works?

Introduction

Over the past two decades a number of reviews of the policing evaluation literature have focused on the question of what police can do to most effectively address crime and disorder. Our goal is not to simply replicate what has already been accomplished

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in these prior papers, although we devote space to reviewing the collective wisdom from these earlier reviews. Instead, we hope to build upon and synthesize these reviews to categorize strategies and tactics based on what police should and should not be doing. Although the evaluation literature is often more focused on the question of “does it work?” we provide, as much as possible, relevant information on what police agencies should be doing to implement effective strategies. On the basis of limited available data, we will also discuss how current policing policies and practices match up with effective practices. That is, are police doing what they should be doing?

We first briefly review the sources of research evidence we consulted for this review. We then turn to our review of what police should be doing and what police should not be doing. We cover a broad span of police strategies, focusing in particular on a number of innovations in policing that have developed over the past 20 to 30 years (see Weisburd & Braga, 2006). After reviewing the research evidence, we discuss the implications for policing and conclude by noting areas where we currently know too little to make informed recommendations.

Sources for the Review

We consulted a number of sources and previous reviews of the policing literature to develop our assessments of what the police should and should not be doing. These included the Maryland report chapter on policing (Sherman, 1997; Sherman & Eck, 2002), the National Research Council (NRC; 2004; see also Weisburd & Eck, 2004) report on police policy and practices, the Evidence-Based Policing Matrix (Lum, Koper, & Telep, 2011) and the Office of Justice Programs’ Crisesolutions.gov website. In addition, we reviewed all Campbell Collaboration systematic reviews concerning policing and law enforcement. The Campbell Collaboration Crime and Justice Coordinating Group (see Farrington & Petrosino, 2001) has published more than 25 systematic reviews on criminal justice topics, many of which are relevant to the question of what works in policing. We also examined additional prior reviews of the policing effectiveness literature including Sherman (1992a), Eck and Maguire (2000), Farrington and Welsh (2005), Weisburd and Braga (2006), and Braga and Weisburd (2007).

We were limited in the resources available to assess what police are currently doing. We relied primarily on the 2007 Law Enforcement Management and Statistics (LEMAS) data (Reaves, 2010), while also making use of survey data from the Police Executive Research Forum (PERF) on policing strategies related to hot spots (PERF, 2008). We used these multiple reviews and data sources to categorize policing strategies into those that we believe police should be engaging in and those they should not be using. We discuss these areas in detail below.

What Should Police Be Doing?

What strategies are most successful, and how should police implement them? We point to a number of successful strategies below that show strong evidence of

effectiveness in addressing crime. We discuss both what works and how police can best adopt what works.

Hot Spots Policing

The evidence base for hot spots policing is particularly strong, making it a logical place to start our discussion. As the NRC (2004) review of police effectiveness noted “. . . studies that focused police resources on crime hot spots provided the strongest collective evidence of police effectiveness that is now available” (p. 250). The Braga (2007) Campbell systematic review reached a similar conclusion; the vast majority of hot spots studies show significant positive results, suggesting that when police focus in on high crime small geographic areas, they can significantly reduce crime in these locations (see also Braga, Papachristos, & Hureau, in press). Fifty percent of calls or incidents are typically concentrated in less than 5% of places (e.g., addresses or street segments) in a city (Sherman, Gartin, & Buerger, 1989; Weisburd, Bushway, Lum, & Yang, 2004), and there is often street-by-street heterogeneity in crime (Groff, Weisburd, & Yang, 2010). That is, the action of crime is often at the street and not the neighborhood level. Thus, police can target a sizable proportion of citywide crime by focusing in on a small number of high crime places (see Weisburd & Telep, 2010).

In Braga and colleagues’ (in press, see also Braga, 2005, 2007) meta-analysis of experimental studies, they found an overall moderate mean effect size, suggesting a significant benefit of the hot spots approach in treatment compared to control areas. As Braga (2007) concluded “extant evaluation research seems to provide fairly robust evidence that hot spots policing is an effective crime prevention strategy” (p. 18). Importantly, there was little evidence to suggest that spatial displacement was a major concern in hot spots interventions. Crime did not simply shift from hot spots to nearby areas (see also Weisburd et al., 2006).

What should police be doing at crime hot spots? While the evidence on the effectiveness of hot spots policing is persuasive, there still remains the question of what specifically police officers should be doing at hot spots to most effectively reduce crime. The literature thus far has not provided the same level of guidance. As Braga (2007) notes, “Unfortunately, the results of this review provide criminal justice policy makers and practitioners with little insight on what types of policing strategies are most preferable in controlling crime hot spots” (p. 19). Nonetheless, the existing literature does shed some light on what police should be doing to most effectively address crime hot spots.

The first hot spots study, the Minneapolis Hot Spots Patrol Experiment, suggested that increased police presence alone leads to some crime and disorder reduction (Sherman & Weisburd, 1995). Officers were not given specific instructions on what activities to engage in while in hot spots. They simply were told to increase patrol time in the treatment hot spots. While the study did not include a systematic examination of officer activities, subsequent analyses by Koper (1995) provide some insight into how much time officers should be spending in hot spots. He found that each additional minute of time officers spent in a hot spot increased survival time by 23%. Survival time here refers to the amount of time after officers departed a hot spot before

disorderly activity occurred. The ideal deal time spent in the hot spot was 14 to 15 min; after about 15 min, there were diminishing returns, and increased time did not lead to greater improvements in residual deterrence. This phenomenon is often referred to as the “Koper curve” as graphing the duration response curve shows the benefits of increased officer time spent in the hot spot until a plateau point is reached (see Koper, 1995, figure 1).

As Koper (1995) notes, “police can maximize crime and disorder reduction at hot spots by making proactive, medium-length stops at these locations on a random, intermittent basis in a manner similar to Sherman’s (1990) crackdown-backoff rotation strategy” (p. 668). Both Koper (1995) and Sherman (1990) argue for an approach in which police travel between hot spots, spending about 15 min in each hot spot to maximize residual deterrence, and moving from hot spot to hot spot in an unpredictable order, so that potential offenders recognize a greater cost of offending in these areas because police enforcement could increase at any moment.

Only recently has Koper’s (1995) recommendation been applied to the design of a hot spots policing experiment. The Sacramento Police Department recently undertook a three month randomized experiment in which officers were explicitly instructed to randomly rotate between treatment group hot spots and to spend about 15 min in each hot spot. Results suggest the Koper (1995) approach to hot spots policing had a significant impact on crime. Treatment group hot spots had significantly fewer calls for service and Part I crime incidents than control group hot spots when comparing the three months of the experiment in 2011 to the same period in 2010 (Telep, Mitchell, & Weisburd, in press).

The Braga and Bond (2008) hot spots experiment in Lowell, Massachusetts included a mediation analysis to assess which hot spots strategies were most effective in reducing crime. Results suggested that situational prevention strategies (see Clarke, 1995) had the strongest impact on crime and disorder. Such strategies focus on efforts to disrupt situational dynamics that allow crime to occur by, for example, increasing risks or effort for offenders or reducing the attractiveness of potential targets. Such approaches are often a prominent part of hot spots interventions and include things like razing abandoned buildings and cleaning up graffiti. Increases in misdemeanor arrests made some contribution to the crime control gains in the treatment hot spots, but were not as influential as the situational efforts. Social service interventions did not have a significant impact. These findings suggest not only the importance of situational crime prevention as a strategy for addressing crime facilitators in hot spots, but also that aggressive order maintenance through increases in arrests may not be the most effective way of addressing high disorder places. We discuss later the potential negative consequences of intensive enforcement (see Braga & Weisburd, 2010). Even if arrest is one means of reducing crime in hot spots, these findings imply it is not the only (or most effective) way, suggesting the need to develop more multifaceted approaches to dealing with high crime areas.

An additional promising approach for dealing with crime hot spots is having officers incorporate principles from problem-oriented policing (POP). We discuss POP more below, but note here the results of a recent experiment in Jacksonville, Florida (Taylor, Koper, & Woods, 2011). This study was the first to compare different hot spot treatments in the same study with one treatment group receiving a more standard saturation patrol response and the second receiving a problem-oriented response that focused on officers analyzing problems in the hot spot and responding with a more tailored solution. Results showed a decrease in crime (though not a statistically significant decrease) in the saturation patrol hot spots, but this decrease lasted only during the 90 day intervention period. In the POP hot spots, there was no significant crime decline during the intervention period, but in the 90 days after the experiment, street violence declined by a statistically significant 33%. These results offer the first experimental evidence suggesting that problem-oriented approaches to dealing with crime hot spots may be more effective than simply increasing patrols in high crime areas. They also suggest that problem solving approaches may take more time to show beneficial results, but any successes that come from a problem-oriented framework may be more long-lasting in nature.

Braga and Weisburd (2010) detail the desirability of POP as a strategy for long-term crime reduction in chronic hot spots. They recognize that even when agencies use problem solving approaches, they often tend to prioritize more traditional, enforcement-oriented responses (see more below). Drawing upon the results of Braga and Bond (2008) and other hot spots studies, they argue that “situational” POP is not only more innovative but also more likely to produce significant crime control benefits. As they conclude,

Based on the available empirical evidence, we believe that police departments should strive to develop situational prevention strategies to deal with crime hot spots. Careful analyses of crime problems at crime hot spots seem likely to yield prevention strategies that will be well positioned to change the situations and dynamics that cause crime to cluster at specific locations. (Braga & Weisburd, 2010, pp. 182-183)

Finally, we briefly discuss the prospects of applying principles from the correctional treatment literature to dealing with crime hot spots. The risk-needs-responsivity model argues that treatment resources should be focused on high risk clients, address criminogenic risk factors, and be responsive to the client’s specific needs while generally focusing on cognitive-behavioral principles (see Andrews & Bonta, 2010). These principles can help inform police crime control strategies. First, the risk principle applies quite clearly to the policing tactics. Police should be directing their resources at the highest risk clients, in other words chronic crime hot spots.

The need principle is a bit trickier; what are the criminogenic needs of places that need to be addressed? Recent research by Weisburd, Groff, and Yang (2012) in Seattle

provides new insights into the key risk factors that help explain whether places become hot spots or not. Weisburd et al. (2012) combined 16 years of data on crime incidents geocoded to street segments with an array of data on characteristics of these streets. They overall find that social and opportunity factors are very highly concentrated at the street block level, and these concentrations are generally very closely linked to concentrations of crime. This suggests that certain factors may contribute to street segments remaining hot spots of crime over time, and hence could be viewed as criminogenic risk factors for a street becoming a crime hot spot.

Some of these factors are easier for the police to address than others. For example, the number of employees working on a block is a strong predictor of a street segment being a chronic hot spot. While the police have little control over the number of people working on a block, they can control the level of guardianship they provide on each block and how they approach the potential crime attractors and generators on each block (e.g., working to install CCTV in parking areas on streets with many employees to reduce car break-ins). Police may be able to have a more direct impact on the activities of high risk juveniles (defined as those with high rates of truancy and poor school performance). Higher numbers of high risk juveniles on a block substantially increased the likelihood a street would be a chronic hot spot. Increased enforcement from police could reduce levels of truancy and limit the amount of time these juveniles spend on their street unsupervised.

Finally, the responsivity principle in the context of crime hot spots suggests the need to systematically assess the conditions of hot spots to better tailor intervention approaches. This is exactly in line with the problem-oriented approach discussed above and described in more detail below. Further study of interventions in crime hot spots could eventually lead to the creation of risk assessment tools, already used quite commonly in correctional interventions, designed specifically for places (see Sherman, 1998). These risk and need assessments could not only help guide police interventions, but also help suggest relevant agencies and groups for the police to partner with to appropriately address a hot spot's criminogenic needs.

Problem-Oriented Policing

POP was described above as a frequent strategy in hot spots interventions, but the problem-oriented framework can be applied to an array of different geographic units and types of problems. Goldstein (1979) originally advocated for a paradigm shift in policing that would replace the primarily reactive, incident driven "standard model of policing" (see below; Weisburd & Eck, 2004) with a model that required the police to be proactive in identifying underlying problems that could be targeted to alleviate crime at its roots. Goldstein's approach was elaborated by Eck and Spelman's (1987) SARA model. SARA is an acronym representing four steps they suggest police should follow when implementing POP. "Scanning" involves the police identifying and prioritizing potential problems. The next step is "analysis," which involves the police thoroughly analyzing the problem(s) using a variety of data sources so that tailored

responses can be developed. The “response” step has the police developing and implementing interventions designed to solve the problem(s). The final step is “assessment,” which involves assessing whether the response worked.

Weisburd, Telep, Hinkle, and Eck (2010) conducted a Campbell review on the effects of POP (i.e., studies that followed the SARA model) on crime and disorder, finding a modest but statistically significant impact among 10 experimental and quasi-experimental studies. Some of the studies in this review that showed smaller effects (or backfire effects) experienced implementation issues that threatened treatment fidelity. The more successfully implemented studies tended to show stronger effects. In addition, Weisburd et al. (2010) also collected less rigorous but more numerous pre/poststudies without a comparison group. While the internal validity of these studies is weaker than those in the main analysis, these studies are notable in the remarkable consistency of positive findings. Weisburd et al. (2010) conclude that “POP as an approach has significant promise to ameliorate crime and disorder problems broadly defined” (p. 164).

How should police be implementing POP? As the Weisburd et al. (2010) review notes, POP covers a broad array of responses to a wide range of problems and our evidence base of rigorous studies remains quite limited. This makes it difficult to give specific recommendations as to how police agencies should deal with certain types of problems. Goldstein’s (1979) notion of POP, however, was not designed to provide agencies with specific ways of handling problems. Indeed, Goldstein (1979, 1990) rejected such one-size fits all tactics that had been typical in the “standard model of policing.” Essential to POP is the careful analysis of problems to design tailor-made solutions. While individualized solutions are important, it is also the case that police agencies across the United States often face very similar types of problems that may respond to similar types of solutions. The Center for Problem-Oriented Policing has recognized this, creating more than 60 problem-specific guides for police that provide recommendations on how agencies can tackle a number of different problems. These guides would likely benefit from additional rigorous evaluations of POP interventions covering a range of problems.

In their Campbell review, Weisburd, Telep, Hinkle, and Eck (2008) do provide some limited guidance on the types of POP interventions that seem to be most effective. As noted earlier, hot spots policing interventions that use POP have shown particularly successful results. In such studies, it is difficult to disentangle whether problem solving or the focus on small geographic areas is driving the success, but the two strategies seem to work quite well in concert. Second, POP appears most effective when police departments are on board and fully committed to the tenets of POP. In Stone’s (1993) POP project in Atlanta public housing, for example, the program suffered greatly because the police were not fully committed to POP. Third, program expectations must be realistic. Officer caseload must be kept to a manageable level and police should not be expected to tackle major problems in a short period of time. In the Minneapolis Repeat Call Address Policing study (Sherman, Buerger, & Gartin, 1989), for example, officers were overwhelmed by dealing with more than 200 problem

addresses in a 12-month period (but see Sherman, 2007). Conversely, Braga and colleagues (1999) gave officers a more manageable 12 hot spot caseload in the Jersey City experiment, and officers were more effective in implementing the response. Fourth, based on limited evidence, collaboration with outside criminal justice agencies appears to be an effective approach in POP. The two probationer–police partnerships included in the review were particularly successful in reducing recidivism (see Weisburd et al., 2008).

In terms of using the SARA model to guide POP, Braga and Weisburd (2006) note that police agencies typically fail to conduct the in-depth problem-analysis advocated by Goldstein (1990). Indeed they often engage in a form of “shallow problem solving” that involves only peripheral analysis of crime data and a largely law enforcement-oriented response (see also Cordner & Biebel, 2005). While we do not want to advocate shallow adherence to the SARA model, the evidence cited here suggests that even shallow problem analysis is effective in reducing crime and disorder. This also suggests that if police were to more closely follow the SARA model and expand their repertoire of responses beyond traditional law enforcement they might enjoy even greater crime control benefits from POP. The assessment phase in SARA also tends to be a weak area for many police agencies, but one that is incredibly important to inform police practice. As Sherman (1998) notes, evidence-based policing involves not only police using strategies and tactics shown to be effective, but also agencies constantly evaluating their practices. The assessment phase of the SARA model provides a framework for agencies to consistently learn from and improve their problem solving projects.

Pulling Levers (Focused Deterrence Strategies)

A recent systematic review of focused deterrence strategies by Braga and Weisburd (in press) suggests such strategies have significant beneficial impacts on crime, particularly violent crime. The overall idea of such approaches is that police can increase the certainty, swiftness, and severity of punishment in a number of innovative ways, often by directly interacting with offenders and communicating clear incentives for compliance and consequences for criminal activity (Kennedy, 2009). Many of these strategies employ the “pulling levers” framework popularized in Boston with Operation Ceasefire (Braga, Kennedy, Waring, & Piehl, 2001), in which gangs were notified that violence would no longer be tolerated and if violence did occur, every available legal lever would be pulled to bring an immediate and certain response.

While Operation Ceasefire was associated with significant declines in young adult homicide in Boston, the lack of a randomized controlled design raises significant questions regarding the validity of the findings. Braga et al. (2001) did find the crime decline in Boston was unique when compared to other major U.S. cities and other cities in Massachusetts. The Braga and Weisburd (in press) review included 11 eligible studies in the main analysis (10 focused on policing), but none were randomized experiments specifically focused on policing. Randomized designs are more difficult

here than in other police interventions because focused deterrence strategies often are implemented citywide. The Braga and Weisburd (in press) results overall suggest strong positive findings for focused deterrence approaches. Ten of the 11 eligible studies showed significant positive impacts on crime.

What should police be doing in focused deterrence approaches? As Braga and Weisburd (in press) note, focused deterrence strategies are a subgroup of POP interventions and as a result, exact strategies should vary by city and be tailored to the specific gang and gun crime problems a jurisdiction faces. In other words, it is important for agencies to not simply replicate what was done in Operation Ceasefire (Braga, 2008). The framework used in Boston is useful, but the same tactics and strategies may not be appropriate across jurisdictions. It is more important that the police focus on developing a working group of representatives from various governmental and social service agencies and conduct a careful analysis to assess underlying issues and tailor strategies to the dynamics of the local gang violence problem. As Braga and Weisburd (in press) conclude “police departments . . . can be effective in controlling specific crime problems when they engage a variety of partners, and tailor an array of tactics to address underlying criminogenic conditions and dynamics.” That is, the interagency working group carefully analyzing local conditions to develop an appropriate tailored strategy appears to be the key to effectiveness in pulling levers and other focused deterrence approaches.

The work of Braga and colleagues (2008) in Lowell is a good example of the need to use analysis and tailor responses to local dynamics. The Project Safe Neighborhoods task force carefully analyzed homicides and assaults to develop a two-pronged approach to deal with different types of gangs. For Hispanic gangs, a more traditional pulling levers approach was used that focused on sending a strong message to chronic offenders that violence would not be tolerated. Lowell also had a sizable Asian gang problem. Asian gangs typically are more organized, more secretive and have a lesser street presence, making it more difficult to communicate deterrent messages. The task force was able to take advantage of the fact that in Lowell, Asian youth gangs were closely tied to gambling operations overseen by older Asians. The importance of these gaming operations to older Asians was an important lever the task force could pull. The task force used older Asian males as guardians to oversee gang members. Gaming operators received the strong message that if there was more youth violence, the gambling operations would be shut down. This proved to be a strong deterrent, and this tailored approach was developed only through the careful analysis of local conditions by the task force.

In addition, it is important to emphasize the word “focused” in focused deterrence strategies. These strategies were successful in part because they created a credible deterrent threat (Kennedy, 2009). This was accomplished, to some extent, by narrowing the focus of the intervention to specific offenders and specific geographic areas. Thus, even though Operation Ceasefire was evaluated as a citywide intervention in Boston,

The deterrence message was applied to a relatively small audience (all gang-involved youth in Boston) rather than a general audience (all youth in Boston), and operated by making explicit cause-and-effect connections between the behavior of the target population and the behavior of the authorities. (Braga et al., 2001, pp. 201-202)

The program was credible because it was realistic to believe the police and their partners could effectively target gang members living and offending in small geographic areas. Therefore, despite evaluations that use the entire city as the unit of analysis, in reality the programs are more focused on specific offenders and specific geographic areas within these larger contexts and hence share much in common with the other effective geographically focused police strategies reviewed above.

Directed Patrol to Prevent Gun Violence

Similar to focused deterrence strategies, the evidence base for directed patrol as a strategy to reduce gun violence is promising, although not as methodologically rigorous as hot spots policing and POP. There are no randomized experiments on directed patrol, but multiple quasi-experimental studies suggest that intensive patrol in high gun crime areas can lead to reductions in gun carrying and gun-related violence. These strategies are in some sense a hot spots approach, but the areas targeted in the interventions are typically much larger than hot spots (e.g., police beats or neighborhoods). A systematic review by Koper and Mayo-Wilson (2006) concluded that directed patrol strategies are effective, but cautioned that the results are based on only seven comparisons from four quasi-experimental studies. While six of these seven comparisons showed positive results, there was also wide variation in the overall effects. For example, the declines in gun-related crime ranged from 29% to 71% across studies and different outcome measures.

What should police be doing in directed patrol interventions? The small number of rigorous studies limits our ability to make strong recommendations on the particular techniques police should use in directed patrol interventions beyond the general recommendation that more intensive police presence in high gun crime beats seems to be effective. The Indianapolis directed patrol study provides some suggestive evidence, because it included two intervention beats, which used somewhat different approaches and had differing results (McGarrell, Chermak, Weiss, & Wilson, 2001). Significant crime control benefits were found only in the beat using more arrests and no significant crime reduction occurred in the beat focusing more on increasing the number of vehicle stops. McGarrell et al. (2001) argue it is unlikely that variation in the rate of gun seizures can explain the difference, because the more successful beat actually had fewer gun seizures. Instead, they argue that the targeted offender approach in the arrest-oriented beat was more effective because it sent a deterrent message that police were increasing surveillance in the area. In addition, arresting these individuals may have been an important way to remove individuals responsible for a lot of gun

crime from the streets. In contrast, the less successful target site used a more general “wider net approach” that may have diluted enforcement resources, reducing effectiveness and efficiency (McGarrell et al., 2001, p. 143). Thus, the overall approach here is similar to the findings of the focused deterrence strategies reviewed above. When deterrence efforts are focused on the highest risk offenders and the deterrent threat is credible significant crime control benefits are more likely.

Using DNA Evidence in Property Crime Cases

Finally, we briefly note promising findings from a multisite experimental study by Roman, Reid, Chalfin, and Knight (2009), which suggests that using DNA evidence in property crime cases leads to a greater number of identified suspects than traditional investigation methods and is a cost-effective approach (see also Wilson, McClure, & Weisburd, 2010). Across all five sites, rapid DNA testing led to higher rates of suspect identification and suspect arrest. Identifying suspects alone does not indicate that crime rates will be affected, so more research is needed on the long-term impact of the increased use of DNA, but this research is promising for police efforts to address crimes they are aware of. In addition, since offenders identified by DNA had more than twice as many prior felony arrests as those identified by standard investigatory work, it is not unreasonable to argue that the increased use of DNA will help identify more high-rate offenders, which could have some beneficial impact on overall crime rates. In an era of low clearance rates for property crime (based on Uniform Crime Report data, 12.4% of burglaries were cleared by arrest in 2010) any changes that can improve the effectiveness of investigatory work should be welcomed by police.

What should police agencies do with this research? The overall conclusion of the Roman et al. (2009) study that agencies should increase the use of DNA testing in property crime cases is fairly clear. We should note though that all the sites had some issues with implementation, particularly because of limited resources for DNA analysis. While recognizing that agency budgets are currently stretched thin, efforts should be made to increase crime lab capabilities to reduce the outsourcing of DNA tests and backlogs in the analysis of evidence. In addition, evidence technicians tended to be better than patrol officers at obtaining usable samples for analysis, so when possible, evidence technicians should be dispatched to the scene of property crimes.

Potential Negative Consequences of Effective Programs: The Importance of Police Legitimacy

Some scholars have recently argued that intensive police interventions such as hot spots policing may erode citizen perceptions of the police (see Kochel, 2011; Rosenbaum, 2006). While our focus here is on the crime control effectiveness of police interventions, police legitimacy remains highly relevant, because a growing body of research suggests that when citizens see the police as more legitimate, they

are more likely to comply with police directives and the law (Tyler, 1990, 2004; Tyler & Huo, 2002). Tyler's (1990) research focuses on procedural justice in police-citizen encounters as the key antecedent of legitimacy. Procedural justice, according to Tyler (2004) includes four components. First, citizens need to participate in the decision process (i.e., be given a voice). Second, neutrality is a key element of procedural justice. Citizens tend to view a situation as fairer when officers are transparent about why they are resolving a dispute in a particular way. Third, individuals want to be treated with dignity and respect. Finally, citizens are more likely to view an interaction as fair when they trust the motives of the police. Citizens will view the action taken as fairer if the officer shows a genuine concern for the interests of the parties involved.

Survey research by Tyler (1990, 2004) and field research by Mastrofski, Snipes, and Supina (1996) and Paternoster, Brame, Bachman, and Sherman (1997) suggests that when officers incorporate these components of procedural justice into their interactions with citizens and suspects, citizens are more likely to comply with police directives and the law because they see the police as more legitimate. These increases in legitimacy thus have the potential to reduce crime by increasing compliance behavior. The concern with hot spots policing and other intensive interventions is that citizens may view the increased police presence and aggressive tactics as procedurally unfair (see Kochel, 2011; Rosenbaum, 2006). Thus, hot spots interventions may lead to short term crime control gains that could be erased in the long term if compliance behavior is reduced as a result of lower citizen perceptions of police legitimacy. Police therefore should prioritize involving the community and consulting with the community as much as possible in intensive efforts and also should strive to treat citizens in a procedurally fair manner. It is situations such as arresting an offender or citing a motorist where procedural justice can play a particularly important role in preserving (or enhancing) the legitimacy of the police despite the undesirable outcome the citizen is receiving from an officer.

Despite these arguments that intensive interventions such as hot spots policing will have negative impacts on police legitimacy, the limited evidence available from such interventions tends to suggest that citizens living in targeted areas welcome the increased police presence (Shaw, 1995; but see Hinkle & Weisburd, 2008). Recent research from three cities in San Bernardino County, California found that a broken windows style intervention in street segments had no impact on resident perceptions of police legitimacy (Weisburd, Hinkle, Famega, & Ready, 2011.). Nonetheless, we have little data on the legitimacy perceptions of individuals who are stopped or arrested in the context of hot spots policing programs. Gau and Brunson (2010) find in interviews that aggressive order maintenance activities can have damaging impacts on youth perceptions of procedural justice and police legitimacy, suggesting that there may be more serious legitimacy consequences for young people or others who are likely to come into contact with police officers in intensive police interventions.

Community policing as a means to increase police legitimacy. Because of the important role police legitimacy appears to play in ensuring police effectiveness, police should

also focus on increasing the fairness of their crime control efforts. We describe below the potential benefits of community policing as one means of enhancing police legitimacy. Community policing is perhaps the best known and certainly the most widely adopted police innovation of the past three decades (Skogan, 2006). What exactly adopting community policing entails is less clear. Definitions typically focus on three components that characterize many programs: some level of community involvement and consultation; decentralization, often increasing line-level officer discretion; and problem solving (see Office of Community Oriented Policing Services [COPS Office], 2009).

The impact of community policing on crime and disorder has been subject to debate and the effects of community consultation on crime and disorder is the focus of a current Campbell systematic review (Weisburd, Bennett, Gill, Telep, & Vitter, in press). Overall, prior reviews (e.g., NRC, 2004; Sherman & Eck, 2002) do not find strong evidence of community policing reducing crime and disorder (but see Connell, Miggans, & McGloin, 2008), although there is evidence that community policing programs can reduce citizen fear and increase citizen satisfaction. The observed connection between legitimacy perceptions and compliance behavior noted above suggests a possible link between community outreach efforts that increase levels of legitimacy and reduced crime. As Sherman and Eck (2002) note, "The capacity of police legitimacy to prevent crime is something community policing may well be effective at creating" (p. 318).

For example, door-to-door visits by officers seem to be an effective approach for both increasing citizen satisfaction and reducing levels of victimization (see NRC, 2004). Wycoff, Pate, Skogan, and Sherman (1985) found that efforts by police in a target neighborhood in Houston to initiate more positive, informal contacts with citizens led to lower rates of victimization. The program focused on the quality of police-citizen interactions and so fits in well with our discussion of police concerns with procedural justice.

Aspects of community policing can be combined with some of the successful interventions described above in ways that may increase their overall effectiveness. For example, Braga and Weisburd (2010) describe a community-oriented approach to hot spots policing focused on community consultation on the tactics used in hot spots and efforts to ensure that hot spots policing strategies do not damage police-resident relationships (see also Scheider, Chapman, & Schapiro, 2009). As Braga and Weisburd (2010) note, "Dealing with hot spot locations in a collaborative and transparent way has great potential to improve police-community relations and enhance overall police legitimacy" (p. 204).

What Should Police Not be Doing?

A question that is almost as important as "what should the police be doing?" is "what should the police not be doing?" Below we review areas where the research evidence is persuasive that police should not be engaging in particular strategies to reduce crime. We review a number of areas below, highlighting key studies that suggest the ineffectiveness of certain policing efforts.

“Standard Model” of Policing

We first focus on tactics referred to by Weisburd and Eck (2004) as the “standard model” of policing. These strategies are often seen as traditional police approaches to dealing with crime that developed largely during the reform or professional era beginning around the 1930s (Kelling & Moore, 1988). While these tactics are now 50 years or more old, they drive much of current police activity. They are seen as the “standard model” for a reason. We focus here on three of the five strategies described by Weisburd and Eck (2004).

First, random preventive patrol (or random beat patrol) has shown little or no evidence of effectiveness as a crime fighting tool (see Sherman & Eck, 2002). The most influential study in this area was the Kansas City preventive patrol experiment conducted by Kelling and colleagues (1974). They found no evidence that changes in the amount of preventive patrol across beats had a significant impact on reported crime or reported victimization. Although the Kansas City study suffered from some methodological flaws (see Sherman, 1992a), the finding that police randomly patrolling beats is not an effective crime deterrent makes sense based on the review of the hot spots literature above. Hot spots policing is an effective strategy in part because it takes advantage of the fact that crime is strongly concentrated in a small number of places. As crime is very concentrated across cities, it makes little sense from an effectiveness and efficiency standpoint to respond with a strategy relying on the random distribution of police resources across large geographic areas (see Weisburd & Telep, 2010).

A second standard policing tactic that appears to have little impact on crime is rapid response to 911 calls. Rapid response can sometimes lead to the apprehension of suspects (e.g., a call for a “hot” robbery), but there is no evidence that rapid response to most calls increases apprehension rates or decreases crime (Kansas City Police Department, 1977; Spelman & Brown, 1984). The problem is that citizens frequently wait too long to call police after an incident occurs. Police should not expect crime control gains to come simply by decreasing response times to the vast majority of calls. In a related way, police should also not use the 911 system as an excuse for why officers cannot engage in more innovative practices. While responding to 911 calls does use a significant portion of patrol officer resources, officers typically have a substantial proportion of time on duty that is uncommitted. Famega, Frank, and Mazerolle (2005), for example, found that more than 75% of officer time in Baltimore was unassigned, providing enough time for police to supplement 911 response with more effective tactics, such as hot spots policing.

Finally, we point to the lack of strong evidence on the effectiveness of general reactive arrest policies. Unlike some of the intensive strategies described above, more across the board increases in arrests are not particularly effective in reducing crime. As Sherman and Eck (2002) note, “the evidence in support of the reactive arrest hypothesis is remarkably unencouraging at both the community and individual levels of analysis” (p. 310). For example, Greenberg and Kessler (1982) and Chamlin (1988) found weak and inconsistent relationships between arrests and crime in longitudinal analyses. Chamlin and Myer (2009), however, note that the social context may affect the

arrest-crime relationship. It is difficult to come to any firm conclusions on the effectiveness of arrest as a strategy to address crime because of mixed evidence on interventions that rely primarily on arrest and the fact that many interventions that include increases in arrest also feature a number of other facets, and disentangling the impacts of various factors can be difficult. We see little reason to believe that more broad-based reactive arrest policies will be very effective in reducing crime, and instead we argue for greater focus, either on high risk offenders, high risk places or both, as we discussed when describing effective policing tactics.

Arrests for cases of misdemeanor domestic violence are a subset of general arrest policies, but one that has been more extensively studied than almost any other policing tactic. Unfortunately for police practitioners, the evidence on the benefits of using arrest in domestic violence cases is decidedly mixed (Sherman, 1992b). The initial Minneapolis experiment suggested arrest could reduce recidivism (Sherman & Berk, 1984), but the success of arrest in the replication studies were more varied and depended in part on the employment status of offenders (Sherman, 1992b), a problematic criterion for officers to rely on. More than half of states have adopted mandatory arrest laws, leaving officers little discretion in the decision to arrest in cases where there is probable cause to believe a misdemeanor has occurred (Hirschel, Buzawa, Pattavina, Faggiani, & Reuland, 2007). Because of the unclear implications of the research evidence in this area, we do not recommend such laws and see no reason to believe that mandatory or presumptive arrest laws will have a significant impact on crime rates.

Drug Abuse Resistance Education (D.A.R.E.)

Rosenbaum summarized the research evidence on D.A.R.E. by titling his 2007 *Criminology and Public Policy* article “Just say no to D.A.R.E.” As Rosenbaum describes, the program receives more than US\$200 million in annual funding, despite little or no research evidence that D.A.R.E. has been successful in reducing adolescent drug or alcohol use (see for example, Becker, Agopian, & Yeh, 1992; Clayton, Cattarello, & Johnstone, 1996; Ringwalt, Ennett, & Holt, 1991; Rosenbaum, Flewelling, Bailey, Ringwalt, & Wilkinson, 1994). As Rosenbaum (2007) concludes, “In light of consistent evidence of ineffectiveness from multiple studies with high validity, public funding of the core D.A.R.E. program should be eliminated or greatly reduced” (p. 815). Recent reformulations of D.A.R.E. have not shown successful results either. For example, the Take Charge of your Life program delivered by D.A.R.E. officers was associated with significant increases in alcohol and cigarette use by program participants compared to a control group (Sloboda et al., 2009).

Second Responder Programs for Domestic Violence

Second responder programs for domestic and family violence victims involve follow-up efforts with domestic violence victims. Programs often include a home visit by teams of police officers and victim advocates or service providers to provide information on

services and legal options. The goal of such programs is to reduce subsequent violence by better informing victims of their opportunities to receive social services. A Campbell review of second responder programs by Davis, Weisburd, and Taylor (2008), however, suggests these efforts are not effective in reducing violence. The programs do, on average, lead to a slight increase in reporting abuse to the police, but there is no evidence such programs reduce violent incidents and thus such programs do not seem to have any beneficial impact on crime and disorder (e.g., Davis & Taylor, 1997; Davis, Weisburd, & Hamilton, 2007). In fact, one study (Hovell, Seid, & Liles, 2006) found significant backfire effects from a second responders program. Domestic violence victims that received a visit by the Family Violence Response Team were 1.7 times more likely to be reabused than a comparison group.

General Implications for Policing

The evidence we have reviewed on what police should be doing suggests certain common elements of effective programs. First, a specific (rather than general) focus seems to be more effective (see also Lum et al., 2011; Weisburd & Eck, 2004). When police narrow in on specific places, types of crime, types of offenders, or mechanisms and factors contributing to crime, they can more efficiently use their resources to address crime problems. Random patrol across a beat, for example, spreads limited police resources too thinly across an area without a clear crime control benefit. Second, small geographic units of analysis are usually a better target than larger geographic areas. Police do not have to ignore neighborhood-based programs, but the success of hot spots policing suggests the importance of focusing in on micro geographic units. Third, police should focus more on proactive rather than reactive tactics (see also Lum et al., 2011; Weisburd & Eck, 2004). The police should view themselves not just as a crime response agency that waits for 911 calls, but instead as a crime prevention agency that can address underlying conditions that allow crime to continue in certain areas. Fourth, police should, when possible, not rely exclusively on law enforcement and arrest to address crime and disorder (see Weisburd & Eck, 2004). While arrest is an important tool of the police, as Goldstein (1990) argues, police can be more effective when they expand the toolbox to include other efforts to address crime such as situational crime prevention and partnerships with other agencies. This idea relates to third party policing strategies (Mazerolle & Ransley, 2005) that emphasize the police partnering with place managers and other city agencies to help address chronic crime locations.

Are the Police Doing What They Should be Doing?

We wanted to review, with the data available, to what extent police agencies are engaging in tactics that work. We rely primarily on 2007 LEMAS data (Reaves, 2010). LEMAS includes several relevant questions on community policing, problem solving, and the use of technology.

LEMAS suggests that nearly all large departments and 56% of all departments provide at least eight hours of training for new officers on community policing, although it is not clear what exactly this training entails. We would encourage departments that use community policing training to focus this training on problem solving skills (e.g., the SARA model) and the importance of procedural justice and police legitimacy. In terms of their level of commitment to problem solving, we see a major difference between the largest agencies (those serving more than one million residents) and all others. About two thirds of the largest agencies actively encourage problem solving, but this drops to just 21% when examining all departments. These numbers are disappointingly low when research suggests that POP can have a beneficial impact on crime and disorder problems.

While data on specific tactics are limited in the LEMAS survey, there are a number of questions related to police technology. Crime analysis and crime mapping in particular are very important for the successful implementation of hot spots policing and POP. The results overall are quite promising in large agencies, but rather disappointing in smaller departments. While more than 90% of the largest agencies are using computers for hot spot identification, just 13% of departments overall are. Even in moderately sized cities (population 100,000-249,999), just 66% of departments use computers to identify hot spots. One hundred percent of the largest departments make use of computers for crime analysis and crime mapping, but only 38% of agencies overall use computers for crime analysis, and 27% use computers for crime mapping. The use of computers for crime mapping and analysis has increased since 2003. Research by Weisburd and Lum (2005) suggests that the use of crime mapping diffused quickly in policing from the mid 1990s through 2001, and these latest LEMAS data suggest that the use of crime mapping continues to increase, but smaller agencies are lagging behind. In terms of patrol officer access to crime data, 31% of the largest agencies and 11% of agencies overall provide offices access to crime maps in their patrol cars. Increasing these percentages would likely aid in making hot spots policing a more routinized part of policing practice.

The PERF (2008) survey of 176 policing agencies of various sizes shows 63% used hot spots policing to reduce violent crime. This was by far the most popular response to the question of how to address violence. When asked what sort of places the agency defines as a hot spot, the majority of respondents noted addresses or intersections (61%) or clusters of addresses (58%). However, a majority of respondents (57%) also identified neighborhoods as potential hot spots and a sizable minority pointed to patrol beats (41%) as the sort of place that would be defined as a hot spot. These larger geographic areas are less likely to lead to the same crime control benefits as narrowing in on small geographic units. When asked what tactics they used at hot spots, a majority of respondents mentioned tactics we have previously discussed as effective ones. These results are encouraging, but still suggest that nearly 40% of surveyed agencies are not using hot spots policing to address violent crime.

Conclusions

There is an emerging evidence base on “what works” in policing and we now have a series of Campbell systematic reviews on policing topics as well as other comprehensive narrative reviews of the police evaluation literature. We examined these reviews to provide assessments of what police should be doing and what they should not be doing and attempted to use the available research to provide some guidance to agencies on how to properly implement effective strategies and tactics. We conclude here by first noting some limitations in our currently available evidence base. This can be seen as a list of areas where we do not know enough to make firm recommendations. We then conclude with some brief remarks on the future of police efforts to address crime and disorder.

What Do We Not Know Enough About?

We know too little to reach firm conclusions about a number of areas important to police work. Perhaps the most prominent policing strategy in this area is broken windows policing (see Wilson & Kelling, 1982). Much of the research on broken windows has focused on New York City and its citywide approach to policing disorder under Commissioner Bratton (Kelling & Coles, 1996). Crime declined substantially in New York in the 1990s, but estimates of the size of the role broken windows policing played in this decline have ranged from large (Bratton & Knobler, 1998, Kelling & Sousa, 2001) to significant but smaller (Messner et al., 2007; Rosenfeld, Fornango, & Rengifo, 2007) to nonexistent (Harcourt & Ludwig, 2006).

A major problem in most of these analyses is the focus almost exclusively on misdemeanor arrests as a proxy for New York’s broken windows policing efforts. While following the broken windows model did lead to substantial increases in misdemeanor arrests, as Kelling and Coles (1996) note, misdemeanor arrests alone oversimplify a much more nuanced approach to policing disorder. As opposed to a zero-tolerance policy focused only on arrest, Kelling and Coles (1996) describe a more community-oriented approach to partnering with residents and community groups to tackle disorder collectively in a way that still respects the civil liberties of offenders. Whether the NYPD was able to adopt this model successfully remains up for debate (e.g., see Greene, 1999), but it does suggest that the intervention is complex and difficult to evaluate, particularly because broken windows policing was adopted citywide simultaneously.

An additional area where current studies have not yet been conclusive is the impact of increasing department size. Marvell and Moody (1996) note that in 78 prior assessments of the link between number of police and crime from 36 studies, just 14 found a significant beneficial impact of more police. However, they also detail the difficulties of disentangling the relationship between crime and number of officers because of specification problems. Their own analyses suggest a significant impact of police levels on crime, particularly at the city level. Evans and Owens (2007, p. 183) point to

methodological improvements of recent studies that examine the relationship between police and crime and find a beneficial effect (see Levitt, 2004), but conclude “Even with these recent efforts, there is scant evidence that more police reduce crime.” Kleck and Barnes (in press) find little relationship between levels of police and general deterrence or incapacitation, calling into question traditional arguments for why more police may lead to less crime.

Related to department size, studies of the impact of hiring grants from the COPS Office on crime are not uniform in their results. The Government Accountability Office’s (2005) assessment of COPS grants suggested the program was responsible for about 5% of the 26% drop in total crime between 1993 and 2000. Other studies found conflicting results, some suggesting a relationship between the grants and crime declines (see Evans & Owens, 2007; Zhao, Scheider, & Thurman, 2002) and others finding little or no impact of the grants on crime rates (see Muhlhausen, 2001; Worrall & Kovandzic, 2007). Based on these findings from studies of both the number of police in general and police hired by COPS grants, we find it difficult to reach strong conclusions about the relationship between levels of police and crime.

The impact of detectives on crime is also a topic worthy of further research. General follow-up investigations by detectives in nonhomicide cases were seen as ineffective by Weisburd and Eck (2004), but we believe we have too little evidence on the work of detectives to provide a full assessment of their effectiveness. Braga, Flynn, Kelling, and Cole (2011) have recently called for a greater focus on the potential crime control benefits of detectives, and this is a promising area for future research.

Finally, we note the conflicting evidence for certain community policing programs. For example, it had generally been thought that foot patrol helped reduced fear of crime but not actual crime (e.g., Police Foundation, 1981), but a recent study in Philadelphia suggests foot patrol might also have the potential to reduce violent crime significantly when focused in on crime hot spots (Ratcliffe, Taniguchi, Groff, & Wood, 2011). Research on the effectiveness of neighborhood watch has also been mixed. Sherman and Eck (2002) concluded neighborhood watch does not work, but a Campbell systematic review by Bennett, Holloway, and Farrington (2008) concluded that neighborhood watch is associated with significant crime declines.

Our current evidence base also limits to some extent the generalizations we can make. Most policing evaluation research examines policing in large urban areas, although we still believe that even smaller departments can learn from the lessons of larger agencies, particularly the importance of using focused interventions in micro geographic areas. It is also the case that we know little about the differential impacts of policing interventions across varying community contexts. Does hot spots policing work better in certain kinds of environments? Does the socioeconomic status or racial composition of a place affect the effectiveness of POP? Finally, we recognize the need for longer follow-ups in policing studies. We know very little about the long-term impacts of most policing innovations.

We also need better data on what agencies are doing in the field. LEMAS is limited in providing data on what departments are actually engaged in day-to-day. As it is a

massive national survey, there are limits to the number of questions that can be asked about daily practices, and even with additional questions, the LEMAS data reflect the survey responses of only certain individuals in the department. Qualitative studies such as Willis, Mastrofski, and Weisburd's (2007) assessment of Compstat in three departments can provide greater insight into what policing looks like day-to-day, and we encourage further qualitative or mixed methods studies to better assess to what extent departments are engaging in the strategies we recommend here.

The Future of Policing

Our review here suggests a number of areas where the evidence base is currently sufficient to make recommendations to police practitioners on strategies that can effectively reduce crime and disorder. We argue police should be focusing on hot spots policing, POP, focused deterrence approaches, directed patrol to reduce gun crime, using DNA in property crime cases, and efforts to enhance legitimacy. In contrast, police should be avoiding standard policing tactics such as random preventive patrol, second responder programs, and D.A.R.E.

More generally, police today should ensure that new strategies and approaches are grounded in the existing literature on what is effective. This means drawing upon approaches that have been proven to work. A major goal then for the future of policing is relying more on rigorous evidence to guide practice (see Weisburd & Neyroud, 2011). We strongly advocate for continued growth in the number of rigorous studies evaluating policing strategies, particularly in the areas above where we do not know enough to make strong recommendations. Still, with the evidence base today police can be increasingly evidence-based in addressing crime and disorder. Such a focus is critical in a time of diminishing resources in policing.

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