

Smarter Solutions for Crime Reduction: The Illinois Criminal Justice Information Authority Strategic Planning Initiative

PROBLEM-ORIENTED POLICING

Problem-oriented policing (POP) is an approach to law enforcement whereby police officers identify specific or underlying conditions of neighborhoods or communities contributing to crime with the premise that reducing or eliminating these conditions will also reduce crime.

The problem-oriented policing model was initially developed in response to a research finding that decreasing or increasing routine “preventive patrol,” within the South Patrol Division of Kansas City, Mo. had no effect on levels of crime, fear of crime among citizens, or community attitudes toward the police regarding delivery of service, police response time, or traffic accidents (Kelling, Pate, Dieckman, & Brown, 1974). Bearing these findings, problem-oriented policing was designed as a proactive policing strategy to identify and address the core foundation of crime in a community to reduce or prevent future criminal activity. The model places a high value on strategies that involve partnerships between local agencies and citizens to address issues impacting neighborhoods and communities.

As many problems and issues affecting criminal behavior in a community are complex, it is important that they be understood in context. In problem-oriented policing, officers routinely and systematically analyze problems, such as drug use demand, abandoned homes or buildings, or loitering at a specific time or place, before trying to solve them, just as they routinely and systematically investigate crimes before making an arrest. Further, an important component to the police investigation is speaking to the different stakeholders, such as community residents, who may have differing views about the causes or solutions to crime in their neighborhood.

Eck and Spelman (1987) developed a four-part model of practical strategies for implementing problem-oriented policing. The model components included *scanning*, *analysis*, *response*, and *assessment* (SARA). Scanning involves police identification and prioritization of potential problems within a jurisdiction. Analysis includes thorough evaluation of the identified problem(s), including any available data sources. The response involves development and implementation of interventions designed to solve the problem(s). The assessment involves evaluating the impact of the response.

Evidence for problem-oriented policing

Since the 1990s, POP has emerged as one of the most widely utilized strategies for policing throughout the United States (Weisburd, Telep, Hinkle, & Eck, 2010).

Problem solving: Problem-oriented policing in Newport News

An evaluation of Eck and Spelman’s model (1987) found a significant reduction in neighborhood-level crime. Their model set out to examine the effects of POP on three persistent problems in Newport News, Va., namely residential burglaries in an apartment complex, thefts from vehicles in shipyard parking lots, and personal robberies committed in a downtown area.

The study set out to determine whether police officials could take actions and implement programs to reduce the magnitude of the aforementioned problems, and whether the problem-solving strategies could be effectively employed on a routine basis.

Using the SARA methodology, the Newport News Police Department assembled a task force of 12 department members and provided training on how

to conceptualize and implement POP. Results of their 16-month pre/post-intervention analyses revealed a 35 percent decrease in reported residential burglaries at the apartment complex, thefts from vehicles in shipyard parking lots were reduced by more than 50 percent, and the number of personal robberies committed in the downtown area of Newport News dropped 43 percent. This study demonstrated that patrol officers, detectives, and supervisors could identify, analyze, and respond to specific problems by tapping into community resources while handling typical service requests.

Policing drug hot spots: The Jersey City drug market analysis experiment

Weisburd and Green (1995) conducted a randomized controlled experiment that assessed an innovative drug enforcement strategy developed as part of a Drug Market Analysis (DMA) program in Jersey City, N.J., (Weisburd & Green, 1995). Utilizing crime mapping technology, 56 “hot spots” of drug activity were identified via DMA computerized mapping systems and through a series of surveillances in an effort to glean information on the physical, social, and criminal characteristics of the identified hot spots. Each identified hot spot was then statistically randomized and neighborhood blocks were either assigned to the experimental or control conditions. The experimental strategy involved reaching out to local business owners and residents within the identified hot spots and querying them about the most troublesome areas.

Once hot spots were confirmed, and when drug-related activity was at its peak, police crackdowns were deployed to reduce such activity. In addition, maintenance programs with the assistance of the patrol division and surveillance teams were initiated within the hot spots in an effort to determine levels of displaced drug-related activity. In contrast, hot spots belonging to the control condition involved the application of unsystematic, arrest-oriented narcotics enforcement based on impromptu target selection.

Comparisons between pre/post-intervention periods across a seven-month timeframe indicate statistically significant and strong effects in support of the experimental strategy on disorder-related emergency calls for service. Furthermore, displacement of reported violent and property crime and disorder to other areas adjacent to the experimental hot spots was not found, suggesting a diffusion of crime control benefits in the experimental locations as compared with the control hot spots. In summary, the study indicates police can be more effective in reducing crime and disorder when they focus on specific locations in addition to specific types of crimes committed.

Problem-oriented policing in violent crime places: A randomized controlled experiment

In another randomized, controlled study that combined the hot spots strategy with POP approaches, Braga et al. (1999) implemented and evaluated the Jersey City Police Department’s (JCPD) pilot program to control violent places within urban areas. Using computerized crime mapping and database technologies, JCPD and Rutgers University researchers identified violent crime hot spots in collaboration with 11 officers from the Violent Crimes Unit (VCU). All 1993 reported robberies, assaults, and emergency calls for service were matched to intersections within Jersey City known for incidences of violent crime. Specifically, matched intersections that exhibited a high propensity for violent crime were identified via temporal analyses and were counted using simple ranking procedures. This process pinpointed 268 intersections, or 56 discrete areas with a high volume of violent crime in Jersey City that were included in the experiment.

Of the 56 areas, 28 pairs of locations were matched according to geographic layout, including the dynamic of the place and physical characteristics, and consistency of reported problems. This information was presented to VCU officers, who selected 12 pairs to be randomly allocated to experimental or control conditions.

Based on the association between community disorder and violent crime found within the literature, VCU officers employed problem-solving strategies aimed at targeting social and physical disorder problems. Common strategies included aggressive order maintenance (repeat foot and radio car patrol, dispersing groups of loiterers, issuing citations for public drinking, investigating suspicious persons), investigations intended to disrupt drug markets, requiring store owners to clean store fronts, increased lighting of the area, housing code enforcement, and construction of fences around vacant lots or abandoned buildings. Problem-specific tactics were employed in experimental locations to control the physical and social disorder of the areas considered to be at high risk, while efforts in control areas were significantly less concentrated.

VCU officers tallied monthly totals of violent crime calls, investigations, and arrests at each of the 24 locations to assess the interventions. In addition, officers made regular contact with key community members for feedback. Analyses revealed that the experimental areas of Jersey City saw statistically significant reductions reported criminal incidents and calls for service as compared to the control areas. Service calls for street fights, property crime, and narcotics violations significantly decreased within the experimental areas, as well as the number of reported robberies, and property crimes. Conditions contributing to neighborhood-level crime were significantly alleviated in more than 90 percent of the experimental locations compared to locations that received control conditions.

While follow-up analyses revealed that specific crime types throughout the experimental areas were not significantly displaced or diffused as a result of POP strategies, evidence was seen of displacement effects for the total number of service calls received, and reported assault incidents and property crimes.

Civil remedies and drug control: A randomized field trial

Mazerolle, Prince, and Roehl (2000) conducted a randomized field experiment to evaluate the impact

of Oakland's Beat Health program on drug and disorder problems in Oakland, Calif. Created by the Oakland Police Department in 1988, the Beat Health program is an example of a civil remedy program that attempts to control drug and disorder problems by concentrating on the physical decay of targeted commercial businesses, private homes, and rental properties across five police beats. The Beat Health process begins with officers visiting nuisance locations and establishing collaborative relationships with business and property owners, on-site managers, or persons believed to have a stake in improving the conditions of a target location. Beat Health officers make suggestions for increasing security, make referrals to city agencies for assistance, communicate legal ordinances and safety codes, offer training to landlords on how to screen potential tenants or how to effectively manage property, coordinate site visits with city inspectors to problem locations, and seek civil action against owners who are noncompliant.

During the intervention phase from October 16, 1995 to March 31, 1996, 100 problematic street blocks, including residential and commercial properties, referred by way of calls from the Beat Health Unit's hotline, community meetings, periodic examination of narcotics calls for service and vice arrests, were targeted for inclusion in the study. Of the 100 targeted, 50 (seven commercial and 43 residential) problematic street blocks were randomly assigned to the Beat Health program, while the other 50 were placed in a control group. The control group endured traditional law enforcement tactics such as surveillance, random patrol, arrests, and executed search warrants.

In an effort to best assess the relative impact of the Beat Health program on drug and disorder problems, the total number of calls for service in each of the 100 locations were enumerated. Also included in the analysis were the number of calls for service incidents 12 months prior to the start of the experiment and 12 months following intervention.

Results of the analyses revealed statistically significant differences between the control and experimental groups when the number of calls about drug problems during the pre-intervention phase was compared to the 12-month post-intervention period. The monthly average number of drug call incidents per site among the experimental group was 7.66 before the intervention was introduced and 7.12 after the intervention. For the control group there was a monthly average of 11.62 drug calls per site before the intervention and 17.94 after the intervention. As expected, drug calls to experimental residential sites declined by 13 percent and increased among the control residential sites by 14 percent. However, drug calls increased by 45 percent among the experimental commercial sites and over a 1,000 percent among the control commercial sites.

Beat Health program intervention was designed to reduce drug problems and no statistically significant differences were found between the experimental and control groups when violent and property crime and disorder problems were examined. Lastly, Mazerolle, et al., (2000) reported evidence of displacement effects of drug problems in and around both the commercial experimental and control sites, with the most significant displacement effects among the commercial control locations.

Reducing gun violence: The Boston Gun Project's Operation Ceasefire

Due to an explosion of homicides among youth in Boston during the mid-1990s, the National Institute of Justice (2001) developed, implemented, and evaluated a POP intervention known as the Boston Gun Project's Operation Ceasefire. Researched in collaboration with the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF), Boston Police Department (BPD) Youth Violence Strike Force (YVSF), street social workers, probation and parole officers, and federal prosecutors, Operation Ceasefire worked to reduce citywide homicide victimization among youths in Boston.

Primary elements of this approach involved a direct law enforcement attack on illicit firearms traffickers supplying youths with guns, and generating a strong deterrent to gang violence. Specific POP intervention strategies included expanding the focus of local, state, and federal authorities to involve in/out of state firearms trafficking, and focusing enforcement attention on makes and calibers of guns distributed by traffickers and of those most used by violent gang members.

The group also focused enforcement attention on guns that had short time-to-crime intervals, attempted to restore obliterated serial numbers of confiscated guns and subsequent investigations involving the trafficking of those restorations, and conducted data analysis based on information collected by the BPD, ATF's comprehensive tracing of guns used in criminal activities, and leads from gang-affiliated arrestees.

The second strategic element, known as "pulling levers," involved deterrence of violent behavior by chronic gang-related offenders by making contact with members of the targeted gangs, and delivering information within gang infested communities and in courtrooms regarding the new initiative and the immediate and intense consequences for violent behavior.

Given the large-scale scope of the project and the fact that it was not possible to randomize or create control gangs or areas for comparison purposes, a nonrandomized quasi-experiment was used to contrast youth homicide trends in Boston with those in other large cities of the United States. In evaluating the impact of the Ceasefire intervention strategy key outcome variables measured were the number of monthly homicide victims ages 24 and under, the number of monthly counts of citizen calls for service for shots fired, and official gun assault incident reports. Time series analyses revealed a 63 percent reduction in the monthly average number of youth homicide victims ($N = 3.5$) prior to the intervention, between January 1991 and April 1996, versus the monthly average number

(N = 1.3) after the intervention took place, between June 1996 and May 1998.

Other statistically significant findings were a 32 percent decrease in the monthly number of citywide calls for shots fired, a 25 percent decrease in the monthly number of citywide gun assaults across all ages, and a 44 percent decrease in the monthly number of District B-2 youth gun assaults. This POP effort demonstrated how practitioners and researchers made a considerable impact in youth violence in Boston, despite the use of deviating empirical methods.

The Knoxville Public Safety Collaborative

In 2002, the Knoxville Police Department (KPD) was awarded the Herman Goldstein Award by the Center for Problem-Oriented Policing for its work in establishing the Knoxville Public Safety Collaborative (KPSC) program, which aimed to provide a proactive, balanced, and holistic approach to enhancing public safety by assisting high-risk probationers and parolees in successful reintegration into the community.

The impetus for this approach took place when the Knoxville community voiced concerns about continued victimization by parolees, including property loss, physical injury, emotional distress, drug use, and other criminal activity. In collaboration with the Tennessee Board of Probation and Parole, the KPD involved human service providers based on the myriad of risk factors that increased recidivism among parolees and probationers, such as chemical dependency, unstable familial relationships, mental health issues, and educational, vocational, and housing deficiencies.

Other partners of the KPSC include the Helen-Ross McNabb Center, Child and Family Tennessee, Metropolitan Drug Commission, and the University of Tennessee's School of Social Work Office of Research and Public Services (SWORPS). Affiliates of the KPSC provided high-risk parolees and probationers with mental health, drug abuse, social, and family services for youths and adults, as

well as intensive case management. Another important aspect of the KPSC model was information sharing between agencies to provide police officers with offenders' addresses, allowing closer monitoring during officers' patrol hours.

SWORPS researchers conducted a quasi-experimental design in which the KPSC's performance from September of 1998 through February of 2001 was evaluated using a comparison group of parolees (N = 261) released to Knoxville between 1996 and 1997. Statistical comparisons between the target KPSC group and the comparison group not involved with the KPSC revealed significant findings. Specifically, 65 percent of participants in the comparison group and 39 percent of the target group went on to receive technical violations. In contrast, just less than 30 percent of the target group had successfully completed or continued to remain compliant with the terms of parole/probation, whereas only 11 percent of the comparison group completed parole/probation and 6 percent were compliant with terms.

The crime triangle: Alcohol, drug use, and vandalism

In Scranton, Pa., Baker and Wolfer (2003) administered pre/post-intervention surveys to examine the effect of POP crime prevention strategies on residents' fear of future victimization. Police officers discovered using crime mapping technology that vandalism, substance related offenses, and other criminal activity among juveniles and young adults in the community were almost exclusively restricted to a local park. Further investigation revealed that the park's littered appearance, overgrown shrubs, and overall poor maintenance led to an impression of communal and/or governmental indifference and minimal risk for apprehension.

In response, Scranton police officers installed surveillance cameras, repaired damaged fences, improved lighting and vegetation, locked the park fence during the evening hours, limited access, posted and enforced park rules and regulations, and

removed a telephone booth from the area believed to be used to arrange for drug deals. In addition, officers reached out to tenants of a nearby apartment complex and encouraged them to report suspicious activities in the park.

These intervention strategies were never actually measured to determine whether they reduced criminal activity in the area or simply displaced the activity to other areas of the community. Results of the administered surveys indicated that prior to intervention, the control group (persons living in the region of the park but not in its immediate vicinity) felt significantly safer in the park during the day than respondents from the target group (persons living in the immediate vicinity of the local park). After the crime prevention strategies were put in place the target group felt significantly safer than the control group. Similar results were recorded on respondents' feelings of safety in the park at night.

The study provides further evidence for the use of POP strategies in not only reducing crime, but also in quelling victimization fears among residents of the community.

What can police do to reduce crime, disorder, and fear?

Weisburd and Eck (2004) conducted the first systematic review of the literature comparing the theoretical basis and empirical evidence surrounding the standard policing model and POP. The evaluation of the standard model of policing was based on the following five broad strategies that have been reported throughout the literature over the past three decades:

- 1) Increasing the size of police agencies.
- 2) Random patrol across all parts of the community.
- 3) Rapid response to calls for service.
- 4) Generally applied follow-up investigations of crimes.
- 5) Generally applied intensive enforcement and arrests.

Despite the fact that the standard model continues to be a dominant approach among police agencies for combating crime and disorder, little empirical evidence supports the efficacy of the model in preventing or reducing crime, disorder, and public fear (Weisburd & Eck, 2004). Such findings are believed to be a result of two primary problems with the standard model of policing. First, the standard model relies on law enforcement agencies to independently prevent and deal with all forms of crime and disorder. Secondly, strategies related to this approach are generalized and applied uniformly across all areas of the community as well as among all offenders.

Resources for problem-oriented policing implementation

Center for Problem-Oriented Policing

Originally created and now managed by the U.S. Department of Justice's Office of Community Oriented Policing Services (COPS), the Center for Problem-Oriented Policing is a non-profit organization comprised of affiliated police practitioners, researchers, and universities dedicated to the advancement of effective problem solving strategies that prevent and/or reduce crime, disorder, and public fear. Launched in 2003 the POP Center website provides a variety of innovative problem analysis tools.

Community Oriented Policing Service

This website is maintained by the Department of Justice's Office of Community Oriented Policing Services (COPS). The purpose of COPS is to advance the knowledge and promote the use of community policing practices throughout state and local law enforcement agencies across the United States. Through the use of partnerships and problem solving techniques, COPS attempts to proactively address the immediate conditions that influence crime, social disorder, and public fear. The COPS website provides links to general community policing information and grant and other funding opportunities for practitioners and researchers to design, implement, or evaluate

community oriented policing strategies to prevent or reduce crime and disorder.

Police Executive Research Forum

The Police Executive Research Forum (PERF) is a national membership organization made up of police executives from the city, county, and state law enforcement agencies that strive to improve policing practices through research and involvement in public policy.

Police Foundation

The Police Foundation is a non-profit research organization that specializes in research and evaluation of police behavior, and law enforcement policy and procedure. The Police Foundation offers customized training and technical assistance programs to state and local law enforcement agencies such as developing training programs, conducting operational reviews, assessing and improving police community relations, early warning and intervention systems, and crime mapping and problem analysis.

Center for Evidence-Based Crime Policy

The Center for Evidence-Based Crime Policy (CEBCP) is housed within George Mason University's Department of Criminology, Law, and Society in Fairfax, Va. CEBCP endeavors to advance the use of empirical research in making decisions about crime and justice policies by rigorously evaluating crime prevention and intervention studies conducted in criminal justice and criminology and serving as an informational link in disseminating information to the public, law enforcement, and police researchers.

Chicago Ceasefire Program

The Chicago Project for Violence Prevention organization works with the community and government entities to prevent and reduce violence, and assist in the development of violence prevention and reduction strategies in Chicago communities and others across Illinois. This

website provides general information about the Ceasefire strategy.

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