

DOES PROBLEM ORIENTED POLICING PREVENT CRIME?

Problem Odaklı Polislik Suçu Önlüyor mu?

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Özet

Suç önleme programlarının etkinliği, en iyi, geçmişte yapılan ve suç önleme programlarının etkinliğini araştıran çalışmaların sistematik analizi ile anlaşılabilir. Bu makalenin amacı, bir suç önleme stratejisi olan problem odaklı polislik (POP) stratejisinin, suç önlemedeki etkinliğini değerlendirmek ve POP ile ilgili bu alanda en güncel bilgiyi okuyucuya sunmaktır. Bu makalede, POP programlarını inceleyen toplam sekiz bilimsel araştırma incelenmiştir. Bu çalışmalardan altı tanesi POP'un suçu önlemede, her türden suç için (cana ve mala karşı) etkinliği olduğuna dair güçlü bulgular sunmaktadır. Diğer iki çalışma ise, olumlu bulgular ortaya koymamıştır ancak bu çalışmaların ciddi yöntem zayıflıkları vardır. Sonuç olarak, POP etkili bir suç önleme tekniği olup, uygulanmaya ve desteklenmeye devam edilmelidir.

Anahtar Kelimeler: Problem Odaklı Polislik, Polis, Suç, Suç Korkusu, Program, Müdahale, Değerlendirme.

Abstract

The effectiveness of crime prevention programs can be best understood through systematic analysis of the past studies that examined the effectiveness of crime prevention programs. The purpose of this paper was to show whether POP is effective in preventing crime and provide the most up-to-date information regarding the effectiveness of POP in crime prevention. Six of eight evaluation studies reviewed in this paper produced strong evidence that POP was an effective strategy in preventing all kinds of crime including serious violent and property crimes. Two evaluations found no positive impact of the programs on crime but these evaluations suffered from serious methodological problems. It is con-

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cluded that POP is an effective crime prevention strategy and should be continued to be supported.

Key Words: Problem Oriented Policing, Police, Crime, Fear of Crime, Program, Intervention, Evaluation.

Introduction

Crime is steadily going down in the U.S. after the peak in 1993, and many claimed credit for this decline, especially police officials, community activists, and proponents of increased incarceration on behalf of their own strategies (Walker, 2001:13). However, crime prevention strategies employed by the related agencies have been frequently based on political ideology and anecdotal evidence rather than scientific evidence. Therefore, crime prevention programs should be subject to a systematic analysis of the past studies that examined the effectiveness of these programs. The purpose is to obtain scientific knowledge on the effectiveness of crime prevention programs and present what works, what does not work and what is promising in crime prevention (Sherman, et al., 2002:xiv).

The text by Sherman and his colleagues (2002) is one example of systematic review of the existing studies on the effectiveness of crime prevention programs to that date. Among the eight police-based prevention programs reviewed in the text, directed patrols at “hot spots” for disorder and gang-violence; proactive arrests for serious repeat offenders and driving under the influence; and problem oriented policing (POP) programs for drug dealing, motor vehicle theft, violent and property crime, and gun carrying were found to be effective in preventing crime.

The purpose of this study is to show whether POP is effective in preventing crime. Studies conducted after 2001 are reviewed here. In this regard, this paper replicates and updates chapter by Sherman and Eck in the text and intends to provide the most up-to-date information regarding the effectiveness of POP in crime prevention.

1. Literature Review

Police work involves so many tasks that range from detecting and apprehending offenders and bringing them before the courts to maintaining public order and providing security for citizens, preventing crime and reducing opportunities for crime. In performing these tasks, early police

strategies had long relied on reactive strategies. During the 1980s, more innovative police strategies, based upon the assumptions of the “Broken Windows” theory by Wilson and Kelling (1982) as an alternative to the Professional Era strategies, were proposed (Carter and Radelet, 1998:28). The “Broken Windows” theory explored the role that disorder played in setting the stage for crime. The authors noted that, even in affluent neighborhoods, if you leave one broken window in a building unrepaired, people inevitably break other windows as one unrepaired window leads people to conclude that no one cares, no one is in charge, and this eventually leads to more serious crimes (Wilson and Kelling, 1982).

The past two decades have been the most innovative period in American policing (Braga, 2002:17). Among the police strategies proposed in this period, POP has become one of the most popular crime prevention strategies (Weisburd and Eck, 2004:45; Braga, 2002:9; Braga, et al., 1999:541). Herman Goldstein initially laid the foundations of POP in 1979 and later in 1990 elaborated and articulated a specific model, the SARA modeling (Scanning, Analysis, Response, and Assessment) and its principles for the POP (as cited in Rojek, 2003:494). The basic idea of POP is that police should focus more attention on the underlying problems that create crime rather than on individual crimes or incidents (Bibel and Cordner, 2003:5). Problems are the combinations of similar incidents, whether crime or acts of disorder, that are related in some ways and occur in the same area causing bigger problems in that area. Each problem needs attention before turning into a bigger problem. Problem oriented policing does not just rely on criminal justice efforts in dealing with crime, but also relies on other local and community agencies, the community, and the private sector, especially when their involvement is to make positive contribution to the reduction of the problem.

In problem oriented policing, police engage in various efforts and activities. That is, police officers are assigned to certain areas in a community for longer periods of time and work with community members to identify wide range of problems the community is concerned about. The capacity of police officers and the department is important in analyzing and identifying the problems existing in the community. Thus, POP focuses on increasing the capacity of both police officers and the departments providing training sessions to police officers which eventually leads to an increase in police accountability. It also aims to reveal when community involvement and/or local agencies and association’s involve-

ment have the potential for significantly reducing a problem in the community (Bullock, et al., 2006:17).

1.1. Problem Specific Techniques

As Goldstein (1990:37) puts, POP is science itself because it involves a rational and analytical approach to problem solving. It consists of four processes through which problems are dealt with: problem identification, problem understanding, the development of response, and the evaluation of the response. These processes are best known in police circles as the SARA model.

Scanning is the initial stage that starts with the identification of the problem, in which problems are identified as a group of related or recurring incidents or a particular concern of the community. Scanning is the most important step in the SARA model. The likelihood of solving problems is dependent on identifying problems in observable and measurable terms.

Analysis is an in-depth exploration of the problem and its underlying causes. Data from various sources that might shed light on the problem are collected. If a problem is properly identified, an analysis will indicate why the problem is occurring and should generate elements of an appropriate response.

Based on the knowledge obtained in previous stages, *Response* involves implementation of a response or sets of responses that could impact the problem. Response might be implemented through efforts of traditional police enforcement combined with mobilization of other public agencies and social institutions, such as municipalities, family, school, and other neighborhood associations.

Assessment consists of ongoing review and monitoring of the process of the response in achieving its objectives. The primary goal of assessment is to determine if the response is having the desired effect on the problem. If the interventions have not achieved the desired response, the process goes back to analysis stage, and a new response may be developed. Whatever the results are, the objective of assessment is to measure the effectiveness of the response employed (Goldstein, 1990; as cited in Rojek, 2003:495).

1.2. Theoretical Basis

Problem oriented policing draws on several complementary theoretical perspectives, such as routine activity and rational choice theories (Braga, et al., 1999:547; McGarrell, et al., 2007:144).

The rational choice perspective draws on the concepts of rational thinking, free will, and hedonism in human nature and deals with offender's decision making processes and their choices and immediate settings of crime. Cornish and Clarke (1987:935) argue that "offenders seek to benefit themselves by their criminal behavior; that this involves the making of decisions and choices, however rudimentary on occasion these choices may be; and that these processes, constrained as they are by time, the offender's cognitive abilities, and by the availability of relevant information, exhibit limited rather normative rationality." The theory emphasizes the specificity in crime in that individual commit crime for many different reasons and with different motives, such as to gain money, status, or excitement. For example, motor vehicle theft can be committed with different motives, such as joyriding, its material value, or for transporting contraband.

The implication of the rational choice theory for POP is that it provides insights for crime prevention. That is, because individuals rationally calculate the costs and benefits that their actions bring to them and carefully assess and take advantage of opportunities conducive to crime, crime prevention should follow a rational stepwise approach. Drawing on these assumptions, the SARA problem solving methodology, a rational and analytical approach to problem solving, could help eliminate opportunities within the settings and intervene offender's motives. It would help police to identify exact times, means and kinds of offenses, the targets of attack, hot spot locations, and the underlying causes of crime and develop appropriate response(s) to prevent crime (Baker and Wolfer, 2003:50). I argue that if these elements of crime are effectively manipulated and addressed thorough POP, crime may be prevented or at least reduced.

The Routine activity theory proposed by Cohen and Felson (1979) and elaborated later by Felson (1994) seeks to explain broad social trends that create opportunities conducive to crime and increase crime rates. As such, women entering workforce, increase in the use of lightweight materials in household goods, and valuable home products have created more opportunities for crime and made dramatic increase in property crime in

the U.S. during 1960s and 1970s. Drawing on rational thinking, hedonism, and free will concepts of classical deterrence theory, the routine activity theory emphasizes the convergence of a motivated offender and suitable target (e.g., victim or property) in the absence of effective guardianship at the same time and at the same place for crime to occur.

Crime occurs when these three essentials of crime come across during the routine activities of people between home, work, school, leisure, and shopping. Then, implication for POP is that crime could be prevented if chances of the three elements of crime coming across at the same place and at the same time were minimized. Manipulation of settings and places at which these three elements of crime that are high likely to come across and understanding how they interact with each other could prevent crime to occur. The SARA problem solving methodology allows us to examine and identify the features of these places and the features of potential targets that might generate crime opportunities for a motivated offender, and develops solutions that could eliminate these opportunities, thereby preventing future crime.

2. Empirical Review

In this paper, studies were assigned a scientific method score (SMS) based on the scientific methods scale developed by Sherman, et al., (2002:16-17). The SMS ranks studies based on their research designs ranging from level 1 as the weakest to level 5 as the strongest. Cross-sectional studies are considered to be the weakest because they are not designed to test a casual relationship but to show magnitude and the direction of the relationship between the two variables studied (Babbie and Maxfield, 2005:97). In contrast, randomized experimental research design is considered as “the gold standard of evaluation design because it is the most rigorous method of evaluating crime prevention programs” (Welsh and Farrington, 2005:340).

Studies with; a simple interrupted time series (ITS) research design without comparison group were assigned an SMS score of 2; a quasi-experimental design with nonequivalent control group and a pretest and posttest were assigned an SMS score of 3; an ITS with no-treatment comparison group(s) and multiple pretests and posttests were assigned an SMS score of 4. No study with a randomized experimental research de-

sign deserving an SMS score of 5 after 2002 were found to include in this review.

2.1. Blitz to Bloom

Smith (2001) examined the impact of “Blitz to Bloom,” a police-led program undertaken by Richmond PD, Virginia, to eliminate ongoing drug problem in the city. The purpose of “blitz” was to prevent drug dealing and related drug crime within the targeted area thorough the police department’s aggressive efforts whereas the “bloom” component was meant to maintain a healthier environment in the area through the social interventions by other city agencies. The program began on April 1, 1999 and lasted throughout the month, 30 days, on Highland Park neighborhood.

A quasi-experimental nonequivalent control group with pretest and posttest research design was used for the impact evaluation. Another neighborhood as a control unit was matched with the intervention group based on crime characteristics and racial make-up. Crime reported to police between October 1998 and October 1999 and citizen calls for service between November 1998 and October 1999 was the outcome measures. A 6-months pre-intervention period and 6-months post-intervention period was used to collect data.

Between and within group comparison findings showed that crime went down significantly in the targeted area during the intervention month in comparison to the average crime rates during the 6 months period before the implementation of the program. No changes in crime rates were observed in the comparison group during the intervention month. A 92% reduction was recorded in crime after the program compared to crime during pre-intervention in the targeted area. However, 6 months after the “blitz” program ended, crime rates went up to its pre-intervention rates within the targeted area. There was an 18% decline in calls for service after the program compared to calls for service before the program in the targeted area but the decline was not significant. No changes in calls for service in the comparison group before and after the intervention were recorded. Similar to crime rates, calls for service returned to pre-intervention levels 6 months after the intervention indicating no long term effectiveness.

This study showed that “blitz to bloom,” a short-duration intervention was effective in reducing crime but not effective in reducing public de-

mand for police service. However, the program continued only one month, April 1999, and its effect was completely lost 6 months after the program ended. The author of this study did not provide any information regarding possible rival explanations threatening the internal validity of the findings, such as general and local trends in crime rates. Most importantly, selection bias is the biggest threat to the internal validity in that because the treatment was not randomly assigned between the groups, the two groups were actually not comparable. Finally, this study was assigned an SMS score of 3. Although the program was found to be effective in reducing crime, due to above mentioned weaknesses of the study, this program can be considered as promising.

2.2. Boston's Operation Ceasefire

Braga et al., (2001) examined the impact of Boston's operation ceasefire on homicide and youth firearms violence. The Boston Gun Project's Operation ceasefire is a POP initiative designed to reduce and prevent youth homicide and youth firearms violence in Boston. Overall homicide rates in the U.S. showed reductions between the early 1980s and the late 1990s. However, Boston experienced a dramatic increase in youth homicide rates, especially in cases involving firearms. Homicide among persons ages 24 and under increased more than threefold, from 22 victims in 1987 to 73 victims in 1990 and remained high after the peak in homicide rates in 1990, an average of 44 youth homicides per year between 1991 and 1995 (Braga et al., 2001:196).

Based on the research, the Operation Ceasefire intervention was developed and put into implementation in May 1996. The Ceasefire included two main components: (1) a direct law enforcement attack on illicit firearms traffickers supplying youths with guns; and (2) an attempt to generate a strong deterrent to gang violence called "pulling levers" strategy. An interrupted time series (ITS) design with nonequivalent multiple control groups was utilized to assess the impact of the program within the city of Boston in comparison to 39 control cities (Campbell, et al., 2002:78).

A statistically significant decrease in the monthly number of youth homicides was found in Boston, from 217 homicides during pre-intervention period to 24 during post-intervention period. Youth homicides declined from 3.5 homicides per month before the program to 1.3

homicides per month after the program- a 63 percent reduction. A statistically significant 25 percent decrease in the monthly number of citywide gun assaults and a 32 percent decrease in the monthly number of citywide shots-fired calls for service were observed after the intervention.

Overall, the researchers of this study did a good job in assessing the impact of the intervention. They ruled out general history and local history, which are the biggest threats to the internal validity in an ITS design, by employing multiple control groups and multiple observations. The intervention was found to be effective in preventing crime. Because of the strengths and the design employed in the study, the study was assigned an SMS score of 4.

2.3. Comprehensive Homicide Initiative

White et al., (2003) examined the effectiveness of a POP strategy, the Comprehensive Homicide Initiative, employed by the Richmond Police Department (RPD), California. The program was designed to address problems of homicide, gun violence, drug, and gang-related violence in the city and put into effect in the fall of 1995.

The impact of the POP program on homicide was evaluated through an Interrupted Time Series design with multiple comparison groups. The comparison groups included 75 other cities with a population of 75,000 or more in California and they matched with Richmond in crime rates. Data were collected based on police records from 1985 through 1994 and compared to data collected from 1995 through 1998. There was adequate pre and post intervention time to project counterfactual information and make both between and within group comparisons.

The findings showed that there was a significant reduction in homicide rates that were resulted from domestic violence, gun, and drug-related during the post-intervention period in Richmond. In addition, homicides occurring outdoors dropped by 37 percent, drive-by shootings dropped by 64 percent, and the rate of homicides committed by offenders with prior convictions dropped by 44 percent. Nonfatal violence, such as rape, robbery, and aggravated assault also declined following the intervention. The study found that the initiative was effective in crime prevention. The study was assigned an SMS score of 4.

2.4. Violence Reduction Partnership

In another study, McGarrell and Chermak (2004) examined the impact of problem solving approach on homicide under a project called The Indianapolis Violence Reduction Partnership (IVRP) in Indianapolis, Indiana. The city experienced a dramatic increase in homicide in the mid-1990s. For example, there were 155 homicides in 1997 whereas there were 60 to 90 homicides per year between 1970s and 1980s. A problem-solving strategy was implemented that modeled a version of the Boston's Operation Ceasefire Project.

The IVRP involved a multi-agency coalition of criminal justice agencies and a variety of community partners. The program was put into effect in late 1988 and early 1999. Analysis showed that homicide victims and suspects were predominantly young and minority males with extensive criminal records. The strategic response employed a deterrence strategy and had three components. First, a number of agencies would respond to neighborhood where the homicide occurred to send a signal of the increased attention for violence incidents. Second, it focused on chronic offenders who engaged in guns, and drug markets. Last component employed lever-pulling (LP) face-to-face meetings with high risks probationers and parolees aiming to convey deterrence by describing the severe penalties available for felons in possession of a firearm and severe sanctions for firearms crimes.

The effectiveness of the program was evaluated; first, by observing the homicide trends in the city; second, by evaluating the impact of the LP meetings on high-risk probationers and parolees' perceptions and criminal behavior. This was done through a quasi-experimental matched control group design before and after the LP meetings. Participants were matched based on gun offense or drug offense. The two groups were also comparable on age, gender, marital status and education but not on race and income. There were adequate number of participants in each group; 209 participants in the experimental group whereas 156 participants in the control group. The data about criminal behavior of the participants were obtained from official sources of police and court records. Finally, the overall impact of the IVRP strategy was assessed by measuring the level of awareness of the target population. To do this, the researchers added an IVRP addendum to the Indianapolis Arrestee Drug Abuse Monitoring (ADAM) questionnaire that asked participants to rate the chances

of someone being arrested and being convicted if they committed homicide, robbery, or drug crimes. The data collected in 8 waves.

The number of homicides declined significantly during the post intervention period. There were 155 homicides recorded in 1997, 145 in 1998 before the program whereas there were 109 in 1999, 101 in 2000, and 115 in 2001 after the program. The addendum added to the ADAM questionnaire tested the overall impact of IVRP on arrestees' perceptions. More than 70 percent of the arrestees reported that chances of getting arrested, being charged and sent to prison were good or very good if they committed homicide, robbery, and drug sale. The criminal justice system was effective in responding to crime based on the arrestees' perceptions. However, we need to be cautious towards these findings in that it was a natural consequence that the arrestees had high perceptions of the CJ system because arrestees were already processed by the system. Their level of perceptions of the system was already heightened.

The researchers used perceptual measures of deterrence rather than objective measures of certainty and celerity, which is more appropriate strategy to measure the impact of deterrence effect because communication is central to deterrence, and it could be best measured by testing respondents' perceptions of it. This study used a matching technique that made the two groups highly comparable. Lastly, the program was found to be effective in reducing homicide and increasing the perceptions the participants of the program but not in reducing the criminal behavior of the participants. The study was assigned an SMS score of 3.

2.5. Weed and Seed

Bridenball and Jesilow (2005) examined the impact of "Weed and Seed" program in a Santa Ana neighborhood in California. The program aimed to reduce citizens' fear of crime by eliminating violent crime, drug trafficking, and drug related crime from targeted high crime neighborhoods. This study employed a quasi-experimental with nonequivalent control group research design to assess the impact of the program on Santa Anita Park residents' attitudes about their neighborhood and their level of fear of crime in comparison to the residents' attitudes in all other neighborhoods in Santa Ana, California.

The Seed component of the program included neighborhood restoration efforts, using social and economic revitalization programs, such as

funding for family services, educational programs, counseling, and organized recreation, as well as improvements in local infrastructure. On the other hand, the Weed component of the program included law enforcement efforts that focus on the most chronic offenders in the targeted area to “weed out” violent crime, gang activity, drug use, and drug trafficking in the targeted neighborhood. The component focused exclusively on prosecution of chronic offenders and increased longer sentences for them upon convictions.

The data were collected from the residents through a telephone survey methodology and face-to-face interviews prior to the sweep in 1998 and 1999 and following the arrests in 2000 and seeding in 2001. Beginning from 1998 in each year a stratified random sample of Santa Ana households was obtained from telephone directory, which generated 240 participants in 1998, 315 in 1999, 320 in 2000, and 363 in 2001. Before and after comparisons showed that the program failed to reveal any positive effects of the program with respect to residents’ attitudes on gang activity and crime. With respect to fear of crime, the percentage of residents who stated that their victimization was likely doubled, from 9% in the pre-intervention period to 18.3% in the post-intervention period.

One problem in this study was that the experimental group in the pretest had a few respondents (34) to reach enough variation and conclude that the observed difference was significant; in fact, maybe, it was not. This is a Type I error. It occurs when we observe a statistical difference due to the small sample size when there is actually none. Another serious problem was that the researchers did not control the differences in neighborhood characteristics, such as population make-up, poverty, and crime rates between the control group and the experimental group. Selection issue was the biggest threat to internal validity of this study. In fact, the two groups were not comparable. Thus, this study was assigned an SMS score of 2 instead of 3.

2.6. Project Safe Neighborhoods

Braga et al. (2006) examined the impact of the U.S. Department of Justice-sponsored Project Safe Neighborhoods (PSN) initiative on homicide and nonfatal serious gun violence in Lowell, Massachusetts. The program brought the researchers from Harvard University and Northeastern University together with criminal justice practitioners (Lowell PD, prosecutors, and probation officers, ATF agents) to assess the characteristics of

the city's homicide and serious nonfatal gun violence problem and to develop solutions for the problem.

The working group engaged the "pulling levers" strategy that focused on deterrence strategy to deter small number of gangs and gang members who generated the bulk of Lowell's serious violence problem. When gang violence occurred, police officers, probation officers, and Department of Youth Service case workers immediately flooded the targeted gang's turf and communicated a direct message to violent gang members saying that their presence was due to the violence and that violence would no longer be tolerated.

The design used for evaluation was a simple interrupted time series design without control group. The findings showed that Lowell experienced a 24% reduction in gun assault incidents and a 50% reduction in homicides during post-intervention period compared to pre-intervention period.

This study had serious limitations to the internal validity of the findings. First, no appropriate post-implementation time period elapsed to conclude that the program was responsible for the observed decline in homicide and gun violence. Second, there was no control group in this study. Whenever an interrupted time series design is utilized, history is the biggest threat to internal validity because there might be a general decline in crime rates during the post intervention period, as well as the observed decline might be seasonal. History could have been ruled out by having a comparison group and applying additional statistical tests. To sum up, due to the above mentioned weaknesses of the design employed in this study, the study was assigned an SMS score of 2.

2.7. Drug Trafficking Interdiction

Another study by Nunn et al., (2006) examined the effectiveness of drug trafficking interdiction in the Brightwood in Indianapolis, Indiana. The SARA problem-solving model was applied by the Indianapolis Metro Drug Task Force (MDTF). The MDTF officers worked with Brightwood PD officers and community members to identify the causes of the problem. Analysis showed that that a small number of drug traffickers were responsible for a large amount of overall crime in the neighborhood, such as robbery, burglary, and gun violence among youth. On April 5, 1999, twenty one major drug dealers were arrested by the police. All of the offenders were arrested and convicted to long federal prison terms.

The impact of the Brightwood interdiction was examined through an interrupted time series design with a non-equivalent control group from citizens' call for service (CFS). The Brightwood (treatment) neighborhood was compared to a Westside (control) neighborhood that did receive the treatment. Both pre and post-intervention observations were made on a weekly basis. There were 52 weekly observations prior to the interdiction whereas there were 104 weekly observations following the intervention between April 1999 and April 2001. Daily CFS was collected from both groups for seven crime categories (burglaries, drugs, guns, personal violence, robbery, theft, and the sum of these as "serious crime") and was totaled into weekly sums. The "*t*" test statistics were used to test statistically significant differences between the two groups.

The findings showed that by the end of year 2 following the interdiction, the Brightwood neighborhood had shown statistically significant reductions in CFS for all serious crimes, burglaries, guns, personal violence, theft, and robbery whereas CFS rates in the Westside control area were not statistically different from its pre-interdiction levels. The interdiction based on POP in Brightwood was found to be effective in reducing CFS in all serious crimes, except for drug crimes. The study was assigned an SMS score of 4.

2.8. Risk-Focused Policing at Places

Weisburd et al., (2008) examined the impact of a Risk-Focused Policing at Places (RFPP) on juvenile delinquency developed and applied by the Redlands Police Department in California. The intervention was based on a POP because the Redlands Police Department utilized the Communities that Care youth survey (CTC) to assess, identify and develop an intervention. The CTC survey identifies 19 risk factors related to juvenile delinquency, such as substance abuse and teen pregnancy in four separate domains (community, family, school, and individual/peer). The Redlands PD administered the survey as part of the program first time in 1997 and later in 1999 to students in grades 6-12. The distribution of risk factors across the group blocks was similar at each time.

A matched block randomized experimental design was utilized to evaluate the impact of the program on youths who were the residents of 26 census block groups, unit of analysis, in Redlands. The impact of the program was measured through self-reported delinquency and surveying

perceptions of the respondents on risk and protective factors and police legitimacy.

The findings showed that there were no differences in the perceptions of the respondents in community risk and protective factors, in family-level risk and protective factors, in school risk factors for delinquency, in individual risk and protection factors, and in self-reported delinquency and substance abuse in the experimental group in comparison to the control group. However, students in the intervention block groups reported having been arrested more than did students in the control group. This might be due to the increased police activity in the intervention area.

Based on these findings, the RFPP had no positive impact on the outcome measures. One problem in this study was that while the RFPP intervention was applied at block group level, unit of analysis, its impact was evaluated on the behavior of the students who resided in those areas. Another problem was selection issue in that the researchers controlled the preexisting differences between the block groups in the intervention and control group but they did not control preexisting individual differences in the intervention and control group before the intervention.

In conclusion, this study examined the impact of the RFPP, a block level intervention, on individual level outcome measures from the perceptions of the respondents and self-reported delinquency. The study had serious methodological problems. The intervention was found to be ineffective. Although this study by design deserved an SMS score of 5, it was assigned an SMS score of 4 due to above mentioned weaknesses.

Conclusion

This paper reviewed the existing research and summarized the empirical evidence on the effectiveness of POP in preventing crime. Among the eight evaluation studies reviewed in this paper, six evaluations found that POP programs were effective in reducing a wide range of crimes, both violent and property crimes. Two evaluations found no positive impact of the programs on crime. However, these two evaluations suffered from serious methodological problems. That is, the RFPP program by Redlands PD, California, was a block level intervention but its evaluation included individual level outcome measures of self reported delinquency and the perceptions of the respondents inherent in ecological fallacy. The second study evaluated the “Weed and Seed” project in a Santa Ana

neighborhood comparing the intervention group with other neighborhoods in the city. However, the selection was the biggest threat to the internal validity of the findings because the researchers did not control the pre-existing differences, such as crime rates and economic conditions between the intervention and control group. Had the researchers of these two studies cared and eliminated these limitations, the evaluations could have produced more positive findings.

On the other hand, the six studies reviewed here produced very strong evidence that POP was an effective strategy in preventing all kinds of crime including serious violent and property crimes. Four of these studies received an SMS score of 4, and the other two received an SMS score of 3 producing consistent and strong evidence regarding the effectiveness of these programs. The evidence found as a result of the review of the evaluations conducted since 2001 also supported the evidence presented by Sherman and Eck in the text that included the evaluations conducted before 2001. Therefore, based on the research examined and the evidence presented herein, the POP approach is an effective and working strategy in reducing and preventing crime.

As discussed previously, POP draws on two theories: the rational choice perspective and the routine activity approach that are also known as “opportunity” theories of crime. These theories focus on crime rather than criminal behavior and assume that “opportunities entice people into criminality,” as opportunity being a root cause of crime (Felson and Clarke, 1998:2). The routine activity deals with broad social changes, including technological advancement and predicts when crime occurs and where crime opportunities arise in society. On the other hand, the rational choice perspective deals with the immediate setting for crime and explains the conditions needed for specific crimes to occur and predicts the ways criminal decisions and choices are made (Cornish and Clarke, 1987:936).

In this context, these two theories can assist and serve to prevent crime. Crime can be prevented by reducing opportunities that entice people for criminal activity. A rational and analytical analysis of opportunities and proximate causes of criminal events can reduce opportunities and prevent crime. The problem specific techniques (SARA) of POP, which involves rational and analytical approach to crime, can help identify these opportunities and develop solutions to reduce them. It also allows researchers to assess these solutions and modify them or develop

new solutions. In this regard, because offenders are rational and carefully calculate the costs and the benefits that crime brings to them, effective manipulation of setting through police activities, such as increased police presence at problem places and/or removal of crime facilitators (guns and drugs, etc.) would reduce opportunities and make crime difficult. A motivated rational offender would consider these changes in the immediate setting for crime that could make crime more difficult and costly and would abstain from committing crime.

The important point to be made after this review is the crucial role that the scanning and analysis stages of the SARA problem solving methodology play in POP. Scanning is the initial identification of the problem, and analysis is an in-depth exploration of the underlying causes of the problem upon which the stages of response and evaluation are built. Of eight studies reviewed herein, only three studies by Braga et al., (2006), Braga et al., (2001), and Chermak and McGarrell (2004) mentioned that the POP programs utilized the assistance of scientists and researchers from the universities in the development of crime prevention strategies, which added considerable value to the programs employed. That is, all three studies showed that the POP programs significantly reduced crime. Therefore, for complex problems, such as gang violence and drug related crimes it is crucial to seek assistance from criminology scientists, especially during the in-depth analysis of the underlying causes of these problems so that effective and appropriate responses could be developed. To this effect, the writer of this paper proposes police departments employ civilian criminologists who can help police to identify proximate causes of the problems and develop appropriate solutions to them.

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Table 1: Summary of Empirical Review

<i>Study, author, year</i>	<i>Project and location</i>	<i>Intervention time</i>	<i>Outcome measure</i>	<i>Research Design</i>	<i>Scientific methods score</i>	<i>Findings</i>
Smith (2001)	“Blitz to Bloom” by Richmond Police Department, Richmond, VA	April 1999	Drug dealing and drug related crime based on police records and citizens calls for service	A quasi-experimental research design (before/after with control group)	3	A significant 92% decline in crime and an 18% drop in calls for service..
Braga, Kennedy, and Warring (2001)	Boston’s operation Ceasefire. Boston, MA	1996-1998	Homicide and nonfatal youth violence	An ITS with nonequivalent multiple comparison units	4	Significant reductions in homicide and nonfatal firearm violence.
White, Fyfe, Campbell, and Goldkamp (2003)	Comprehensive Homicide Initiative Richmond, CA	December 1997/ January 1998	Homicide, gun violence, drug, and gang-related violence	An ITS with no treatment multiple control units.	4	A significant and substantial reduction in homicides in the treatment city.
Chermak and McGarrell (2004)	Indianapolis Violence Reduction Partnership (IVRP) Indianapolis, IN	Late 1998/ early 1999.	Homicide trends, perceptions and criminal behaviors of the LP attendees	Simple ITS, a quasi-experimental matched control group before and after, repeated cross-sectional design	3	Significant reduction in homicide, increase in the perceptions of LP attendees, but LP attendees recidivated more than non-attendees.
Bridenball and Jesilow (2005)	“Weed and Seed” Santa Ana neighborhood, CA	March 2000	Perceptions of the participants about the program through telephone and face-to-face interviews	A quasi-experimental design (before/after with control group)	2	No significant changes after the program.
Braga, McDevitt & Pierce (2006)	Project Safe Neighborhoods Lowell, MA	October 2002	Homicide and nonfatal gun violence	A simple ITS (without control group)	2	A 24% reduction in gun assault incidents and a 50% reduction in homicide.
Nunn, Quinet, Rowe & Christ (2006)	Indianapolis Metro Drug Task Force Brightwood, IN	April 5, 1999 (A one-day interdiction)	Citizen calls for service for burglary, drug, gun, personal violence, robbery, and theft.	An ITS with a non-equivalent control group	4	Statistically significant reductions in all serious crimes.
Weisburd, Morris and Ready (2008)	Risk-Focused Policing at Places (RFPP).A problem oriented policing project Redlands, CA	1997-2003	Self-reported delinquency and the perceptions of the participants about the program	A random experimentation	4	Unable to influence respondent’s perceptions and self-reported delinquency.

