



Evidence-Based Policing: A Comparative Analysis of Eight Experimental Studies focused in the area of Targeted Policing

Avdi S Avdija¹

Indiana University of Pennsylvania, USA

Abstract

This paper examines targeted policing as a form of evidence-based policing. The paper reviews eight experimental studies related to targeted policing. The main objectives of this paper are (1) to discuss the theoretical perspective for implementation of targeted policing; (2) to discuss empirical evidence for implementation of targeted policing; and (3) to assess the impact of programs that are based on targeted policing philosophy; the focus will be to answer the question: does targeted policing reduce crime? This is assessed by using the Maryland Scientific Methods Scale (1 to 5 point SMS scoring system) to determine the scientific rigor of each study that has evaluated one or more of the proactive police tactics/strategies such as, “hot spots,” “second response,” and “crackdowns.” The overall agenda in this paper is to judge – through an extended literature review – whether targeted policing (as a proactive crime prevention approach) reduces crime, and based on the aggregate results of the eight experimental studies included in this research paper, to make appropriate recommendations for the criminal justice agencies in terms of allocating their resources to the most active crime-prone places and most active offenders by the type of offense.

Key Words: Targeted Policing, hot spots, crime prevention, evaluations, evidence-based.

Introduction

Targeted policing came about as a result of lack of police resources while the police departments were trying to maintain the adequacy of crime prevention. In this context, many police departments have had limited resources to fight crime; thus, by focusing on high-crime areas, the police could better utilize their limited resources in fighting crime.

Targeted policing can be defined as an element of successful policing; a form of policing that is evidence-based. The term “evidence-based” suggests the use of empirical evidence (scientific evidence) to make informed decisions about certain policies, programs, or projects in policing (Sherman, 1998; MacKenzie, 2000; Sherman et al., 2006; MacKenzie, 2006). Targeted policing, as a form of evidence-based policing, “uses research to guide practice and evaluate practitioners; it uses the best evidence to shape the best

¹ Ph.D. Candidate, Indiana University of Pennsylvania, 9 Duff Rd. Apt. 6 Pittsburgh PA, 15235, USA.
Email: a.s.avdija@iup.edu

practice” (Sherman, 1998, p. 4). A more universally acceptable definition of targeted policing is a form of policing that is place-specific, offense-specific, offender-specific, and time-specific. The primary role of targeted policing is to get the police department to focus on what causes a particular incident rather than the incident itself; basically an analysis of the symptoms of the incidents. In other words, the public expects the police to look at the causes of problems and then find the cure for those problems. Generally, this means the police should focus on high-crime places and high-risk offenders (repeat offenders) that are the facilitators of crime. Reiteratively, when implementing targeted policing, a great deal of police work is dedicated to identifying and diagnosing the locations and the types of the problems, and then take all necessary measures to solve those problems (Weisburd et al., 2008). Locations of the problems suggests that “crime does not occur evenly across urban landscapes; rather, it is concentrated in relatively small places [and that involves a relatively small number of repeat/chronic offenders] that generate more than half of all criminal events” (Braga, 1999). However, targeted policing is not only focused on crime places, it also includes proactive interventions that are aimed at preventing certain crime problems by focusing on preventing victimization. This includes collaborative efforts between the police and social services with an objective aimed at reducing victimization, whether that is domestic victimization, random victimization, or situational victimization.

In summation, targeted policing that focuses on criminal places and specific types of crimes has come about as a result of an effort of criminal justice agencies to proactively identify and target criminal areas that will prevent crime (by using police tactics and strategies that, based on empirical evidence, work) while at the same time reducing police spending (Sherman, Farrington, Welsh, & MacKenzie, 2002; Sherman et al., 2006; Braga, 2001).

Theoretical Perspectives of Targeted Policing

There are three theoretical explanations of criminal places that link location, opportunity, and motivation to crime. Theories that are suitable to explain the spatial and temporal relationships of crime include: the Routine Activities Theory, the Rational Choice Theory, and the Incapacitation Theory (incapacitation is mainly related to criminal justice policy). The discussion of theories in this paper is justified based on the fact that targeted policing relies heavily on the explanations that these theories provide about criminal operations since these theories can be applied to prevention programs. These theories guide the research in this area.

Rational Choice Theory

According to the Rational Choice Theory, individuals who commit criminal acts operate by rational decisions expected to maximize their profit and minimize their loss (Lilly, Cullen, & Ball, 1995, 2006). For this reason, “criminals do not move randomly through neighborhoods – a predictable pattern usually exists” (Baker & Wolfer, 2003, p. 48). Furthermore, rational choice theory tells us that offenders are capable of making rational choices and they are aware of the criminal opportunities they have. “A criminal who is motivated to commit crimes uses cues to locate, identify, and target sites and hot spots” (Baker & Wolfer, 2003, p. 48), places in which he is likely to succeed (commit crimes and not get caught) (see Laub, 2004; Cullen & Agnew, 2006). This suggests that there is a connection between opportunities for offending, the environmental conditions,

and the calculation of success that makes the offender ready to engage in criminal acts (Baker & Wolfer, 2003; Williams & McShane, 1994; see also Cornish & Clarke, 1986; also see Cohen & Felson, 1979; Clarke, 1997; Agnew, 2005). Thus, engaging in criminal activities, from this point of view, is a calculated decision. At least, we can say that the decision for the involvement in criminal activities, to some extent, is related to some form of calculating the costs and the benefit (Bennett, 1986). Although choice may not entirely be at the offender's conscience, the calculation of success in committing a crime is taken into account. Furthermore, it is also the experience that provides the offender with serial cues associated with environmental opportunities and risks. For example, awareness of the surroundings and familiarity with neighborhood reinforces criminal patterns (Baker & Wolfer, 2003). Consequently, offenders plan potential crimes and make decisions based on the information they possess about the neighborhood (Cornish & Clark, 1986; Akers, 1990; Satz & Ferejohn, 1994). Specific crime-prone places thus provide criminals with the opportunities – offenders that operate in those places (when the opportunity is presented to them they) select their targets to maximize the benefits and minimize the costs while counting on feelings that they can commit crimes with less chance of being detected (Cornish & Clark, 1986; Baker & Wolfer, 2003). The ability to calculate the chance of being detected is a part of the rational thinking process.

Routine Activities Theory

According to the Routine Activities Theory, in order for a crime to occur, three necessary elements should be present: an offender, a victim, and a location. Those three elements thus form a crime triangle (Cohen & Felson, 1979; Barker & Wolfer, 2003; Miller, Schreck, & Tewksbury, 2006; Lilly, Cullen, & Ball, 2006; Cullen & Agnew, 2006). Above all, there must be some form of motivation taking place before a crime can occur. In other words, an offender identifies the clues to locate and target sites (as rational choice theory explains to us), but unless that offender is motivated to commit a criminal act, no crime will occur. However, “being in a situation where the advantages of crime appear to be great, means that the odds are higher and even the most moral person will get into trouble” (Miller, Schreck, & Tewksbury, 2006, p. 82). This translates that crime-prone areas, in themselves, present the situations in which there are opportunities for crimes that motivate potential offenders and convince them that an involvement in crime is worth their time. Thus, by eliminating the opportunity that those crime-prone areas offer to potential motivated offenders, the police can prevent crime before it happens or can prevent the repetition of its occurrence (Weisburd & Braga, 2006; Sherman, Gartin, & Buerger, 1989). This can be done through a proactive crime prevention approach that in this paper is referred to as “targeted policing.”

Furthermore, according to the routine activities theory, even if there is a motivated offender and a suitable target, crime will not occur unless the target is poorly guarded (Cohen & Felson, 1979). Thus, an effective guardianship (i.e., police visibility, frequent police patrols, and or proactive arrests) intercepts the crime triangle and makes the crime more risky and thus less likely to occur (Miller, Schreck, & Tewksbury, 2006). Reiteratively, crime-prone places provide the opportunity and motivation to offenders to engage in crimes; however, effective proactive police intervention (the presence of effective guardianship) will intercept the necessary conditions for the crime to occur.

Incapacitation Theory

Incapacitation theory in this paper relates mainly to chronic offenders or repeated offenders, as well as crime-prone places. Incapacitation theory is based on the idea that a small portion of criminals commit a disproportionate number of crimes (MacKenzie, 2006; Martin & Sherman, 1986; Sherman, Farrington, Welsh, & MacKenzie, 2006). Thus, by focusing specifically on repeated offenders (by arresting them), the criminal justice system can take away their capacity to commit further or future crimes, at least for the time that they will be in incarcerated. Taking away their ability to commit further or future crimes is not only referred to individual offenders but also to crime-prone places. That is, by eliminating crime-prone places, obviously the criminal justice agencies (the police, through proactive police tactics and strategies) can take away the capacity of these places to produce/generate crime.

In short, incapacitation theory helps us answer the question: why focus on crime-prone areas or on specific types of crimes? Statistically, residential locations can generate as much as 85% of the repeat calls for service (Sherman, 1992; Sherman, 1995). Moreover, research shows that in many communities, more than 50% of the calls for service come from only 3% of the locations (see Sherman, 1989; Sherman, 1992; Sherman, et al., 1992). Thus, by identifying these locations through crime analysis and by implementing a proactive crime prevention approach, the police can eliminate those crime-prone places (a meso-level [secondary] crime prevention); and by apprehending repeat offenders, the police can restrict their opportunity to commit further or future crimes (a micro-level [tertiary] crime prevention).

Inclusion Criteria of (Eight) Experimental Studies

There are many studies that have evaluated police proactive crime fighting strategies, but not all of them meet the inclusion criteria that support the purpose of this paper. Thus, this paper includes only a limited number of studies. These are studies that (1) were at least quasi-experimental in nature with a control or comparison group; (2) their outcome measures included crime prevention and/or reduction of citizens' fear of crime; (3) the police undertook a proactive approach to reducing or eliminating crime; (4) and that there were alternative strategies in dealing with the same types of crime problems. Such strategies include the implementation of reactive rather than proactive policing. And finally, (5) studies included in this paper are those that specifically focused on high-crime areas, high-risk offenders, and or specific types of offenses.

Method of Analysis

For this study, the researcher has used the SMS scoring system; a scale developed by researchers at the University of Maryland in 1997 (see Farrington et al., 2002; Sherman et al., 2002, 2006). The SMS scoring system is a two-step procedure that is used to draw conclusions about what works, what doesn't work, and what's promising in terms of creating new or changing existing crime prevention policies by challenging their achievements.

The first step of this procedure deals with assessment of each individual study for the quality of research design and methodology. At this stage, the researcher determines the scientific rigor of each study by looking at the research design, selection problems, attrition, statistical analysis, statistical controls, and the sample size and then decides for inclusion of that study in the analysis. During this assessment, a scientific rigor score (levels

1 to 5 on SMS) is given to each study that meets the criteria specified in step one of the SMS scoring procedure. This criterion is specified as follows: “level one studies” are those with poor research design that can only demonstrate a correlation between independent variable and the dependent variable – usually cross-sectional designs. “Level two studies” are those that have a pre-test and a post-test but without a comparable group. “Level three studies” are those studies that have a pre-test, post-test, an experimental and a comparable group. “Level four studies” are those studies that have multiple experimental and comparison groups, with pre and post-tests. And “level five studies” are those studies that follow the principles of a true (randomized) experiment. They are the most rigorous studies.

In step two of this procedure, the researcher determines the number of studies (level three or above – at least quasi-experimental in nature) that meet the criteria of what works, what doesn't work, and what's promising. To determine the degree to which, in this case, a police tactic, strategy, or program works, the researcher should have a minimum of two studies (level 3 or above) showing the effectiveness of police tactics, strategies, or programs with statistical significance usually at $p > .05$ (two experimental studies that have tested the police tactic, strategy, or program). Police strategies, tactics, or programs that do not work, on the other hand, should have a minimum of two studies (level 3 or above) showing ineffectiveness with statistical significance at $p > .05$; otherwise, the researchers are required to conclude that there is not enough scientific evidence to declare a police strategy, tactic, or program as ineffective (Farrington et al., 2002; see also Sherman et al., 1997; Sherman et al., 2002, 2006; Walsh & Farrington, 2005; MacKenzie, 2006).

A Brief Review of Eight Targeted Policing Studies

The moving force behind the development of the targeted policing was largely fueled by the research findings of the Kansas City Preventive Patrol Experiment that was conducted from October of 1972 through 1973, in Missouri. A short summary of this experimental study is presented below followed by the review of the seven other experimental studies that are included in the comparative analysis (see Table 1).

In 1972, the police foundation supported the first comprehensive and scientific research on police patrol effects that perhaps set the stage for subsequent evaluations of police effectiveness. This experiment is known as Kansas City Preventive Patrol Experiment (KCPPE). The experiment was conducted by the Kansas City police department, Missouri. The main focus of this experimental study was on two fundamental questions: (1) Is preventive police patrol effective? (2) What effects does police visibility have on the residents' feelings of safety? (Kelling, Pate, Dieckman, & Brown, 1974; Purpura, 1996). Consequentially, this study was aimed at finding out the usefulness of preventive (non-directed) random police patrols.

Methodologically, this was an experiment with the treatment group and the control group. Fifteen beats (designated as the experiment area) out of twenty-four beats were scientifically selected and divided in three matched groups of police patrol. The fifteen beats were divided as follows: (1) Five Reactive Beats – no preventive patrol – police entered the area only to respond to citizen calls and emergencies; (2) Five Proactive Beats – the police doubled and even tripled the frequency of patrols and the number of patrol officers; and (3) Five Control Beats – the police department operated at the same level of patrol as they used to patrol in those beats before the experiment. It should be noted that a

random pattern was established between the proactive beats, the reactive beats, and the control beats. The duration of this experiment was one year.

During the implementation of the experiment (during the treatment) the community was kept uninformed of the experiment (of the changes in patrol) because of the fear that it might affect the experiment and the fear that it might have had in the community. It was assumed that if the community knew there were no officers on patrol (in the reactive beats) the citizens' fear of crime would increase as well as the crime rates, due to the opportunities available to (or in favor of) criminals to commit crimes (Bohm & Haley, 1997; Purpura, 1996).

Surprisingly, the findings of this experimental study showed that there were little or no changes in crime rates, rates of reporting crime to the police, people's fear of crime, and opinions about police effectiveness by either an increase or decrease in preventive patrols (Purpura, 1996). That is, the citizens did not notice the difference when the frequency of patrols was changed; also frequency of patrols had no significant effect on residential or commercial burglaries, auto theft, larcenies involving auto accessories, robberies, or other vandalism crimes (Kelling, Pate, Dieckman, & Brown, 1974, pp. 347-355).

Overall, this study suggests that frequent police preventive/proactive patrols (non-directed police patrols) have little effect in preventing crime or making citizens feel safe and that the resources normally allocated to preventive patrol activities could be allocated elsewhere. Consequently, this study provided some evidence that police visibility or police presence has no significant impact on crime. Thus, proactive police patrols have little value in preventing crime and as such, they are ineffective. As Carl Klockers, from University of Delaware, puts it, "...it makes about as much sense to have police patrol routinely in cars to fight crime as it does to have firefighters patrolling routinely in fire trucks to fight fire." Nevertheless, since this police study was the first of this kind, perhaps the findings suggested other strategies for reducing crime and citizens' fear of crime – it suggested the implementation of targeted crime prevention strategies (Kelling, Pate, Dieckman, & Brown, 1974), which will be discussed below. Additionally, it suggested that the resources allocated to random patrol activities (non-directed police patrols) should be allocated to targeted policing strategies, and the focus of the police activities should be on crime-generating places – on "hot spots" and "hot times" associated with hot spots.

Minneapolis Hot Spots Patrol Program

In 1995, Sherman and Weisburd (1995), in collaboration with Minneapolis Police Department, in Minnesota, conducted a field experiment of police patrol in high-crime areas known as "hot spots." The purpose of this experiment was to challenge the conclusions of the Kansas City Preventive Patrol Experiment that was conducted in 1973, in Missouri, that showed that the police patrol has little to do with preventing or controlling crime. Furthermore, the hypothesis of this experimental study was that an increase of uniformed police patrols (in the experimental group) patrolling the streets, will prevent or lower the crime rates – a proactive approach. However, this police program has used a different strategy in reducing crime. The focus of police patrols was targeted; that is, the frequency of police patrol was increased in certain areas labeled as "hot spots." Thus, an increased police presence in those "hot spots" areas will have a deterrent effect on crime (Sherman, 1995; Sherman & Weisburd, 1995).

Methodologically, the Minneapolis study met the criteria of a true experiment. It had the control and treatment groups of 110 identified hot spots (there were 55 hot spots

randomly allocated to each group). The 110 identified hot spots comprised of address clusters that experienced a high volume of citizen calls for service (Sherman & Weisburd, 1995; Braga, 2001; Braga, 2006). The Minneapolis hot spots patrol experiment provided 3 hours a day of intermittent, unpredictable police presence to 55 randomly selected hot spot intersections in the city (the experimental group). Another 55 hot spots (the control group) received the normal patrol coverage (Sherman, 1995; Braga, 2001). The duration of this experiment was a year long. During this time, the police experienced twice as much patrol presence in the experimental area as compared to the control area.

The results of this study indicated that while the impact on all reported crime was small, it was statistically significant at 13 percent and even greater for more serious crimes. Further analysis indicated that the frequent rotation of the hot spot patrols (directed police patrols), rather than long spells of patrol at one hot spot was more effective (Koper, 1995). The analysis also showed that the longer the police stayed at one hot spot, the lower the crime rate would dip – up to a point. This would change however if the police presence in hot spots was for more than fifteen minutes. In other words, more than fifteen minutes of police presence in one hot spot produced retreating effects. This experimental study thus suggested that, “the optimal way to use police visibility may be to have the police travel from hot spot to hot spot, and staying for about ten [to fifteen] minutes at each one” (Sherman, 1995). The final results of this experimental study showed that during the 12 months of the implementation of this research experiment, there were significant and stable differences in criminal activities between the experimental group and the control group. That is, the number of citizen calls for crime and disorder significantly decreased comparing to the control group. Therefore, this program (frequent police patrols directed at specific areas at specific times) appeared to work in preventing crime (Sherman & Weisburd, 1995).

Jersey City Drug Markets Analysis Program

In 1993, Weisburd and Green (1995), in collaboration with the Jersey City Police Department, in New Jersey, conducted an experimental research as a part of the problem-oriented policing strategy. The focus of this experiment was on whether the application of problem-oriented policing strategy in drug markets would lead to more effective drug policing than that of more traditional policing methods (proactive vs. reactive approaches in dealing with drug and gun-related problems). This innovative drug enforcement strategy focused specifically on “hot spots” of drug activities (Weisburd & Green, 1995). The experiment was initiated as a part of the evaluation of Drug Market Analysis Program (DMAP) sponsored by the National Institute of Justice, in response to the need of determining if a more proactive approach would work better for the police in dealing with drug-related crimes.

For a period of six months prior to the experiment, as part of preparation for the execution of this experiment, the police managed to identify 56 drug “hot spots” in the Jersey City. These “hot spots” were identified by using narcotics sales arrests, drug-related emergency calls for service, and narcotics tip-line. Then those 56 hot spots were randomly divided into two groups. Six narcotics squads of the Jersey City Police Department were then randomly assigned to experimental and control hot spots. Furthermore, what’s positive about this research design is that the two groups of hot spots (experimental group [28 hot spots] and control group [28 hot spots]) have similar characteristics (Weisburd & Green, 1995; Braga, 2001).

The treatment that the experimental group received consisted of three stages: planning, implementation, and maintenance. In the planning stage, the police officers mainly collected information about drug-related activities by talking to business owners and residents. During the second stage (during the implementation stage), the police officers started the crackdown operation with the intention of closing down drug-related activities. And during the last stage, the police officers maintained the progress they gained in the implementation stage. This progress was maintained by increasing the police presence (i.e., foot patrol, surveillance, etc.) in the area. Conversely, in the control group (control hot spots area), the police continued their traditional (reactive) drug enforcement strategies i.e. arrest-oriented enforcement (Weisburd & Green, 1995).

The findings of this experimental research indicated that in the targeted hot spots (in the experimental group), the number of public disorder calls for suspicious persons, drug-related activities, and other public moral-related crimes (i.e., prostitution, liquor violations, gambling, etc.) decreased after the experiment. The number of calls were measured 7 months prior to the intervention and 7 months after the intervention. Furthermore, the number of narcotics calls also decreased, in most of the experimental hot spots areas and the displacement of narcotics calls surrounding the hot spots was minimal (Weisburd & Green, 1995).

Overall, this study suggests the importance of implementing a proactive approach in dealing with specific types of crime in specific places at specific times. Thus, the police need to employ different tactics in dealing with different types of crime – by using a proactive approach.

Kansas City Gun Experiment

In 1991, Sherman, Shaw, & Rogan (1995), in collaboration with the Kansas City Police Department, in Missouri, conducted an experiment in an effort to determine the effectiveness of a police program that was aimed at reduce gun-related crimes and improve citizens' satisfaction with the police, as well as reducing the fear of crime. The main goal of this police experiment was to seize as many illegal firearms as possible. The second goal of this study was based on the idea that if the police remove guns off the street, then there would be fewer gun-related crimes. One of the main objectives of this police experiment was to reduce the number of gun-related crime from 20 times higher than national average (at the time when the experiment started) down to normal by the end of this experiment (a twenty-nine weeks later). The second outcome objective of this study was aimed to find out whether greater enforcement of existing laws against carrying concealed weapons via safety frisks, during traffic stops, plain view, etc. would reduce gun-related crimes (Sherman, et al., 1995; Braga, 2001).

Methodologically, this was a quasi-experimental design with the non-equivalent control group. However, the target beat matched the control beat with nearly identical level of drive-by shooting but they were not matched on other characteristics. The target beat was chosen on an 80-by-10 block area in Kansas City. Both the target beat and the control beat were considered as “hot spots” where the concentration of crime was high. In this experiment, the hot spot locations were “identified by a University of Maryland computer analysis of all crimes in the area” (National Institute of Justice, 1995, p. 4). The duration of the experiment was 29 weeks. During this time, the police made intensive patrols in the targeted beat aimed at seizing as many guns as possible.

The findings of this experimental study indicated that during the extra patrol period, gun crime decreased significantly in the target beat and just slightly increased in the control beat (Sherman & Rogan, 1995). Moreover, the target area showed a significant decrease of both drive-by shootings and homicides during this extra patrol period. On the other hand, there were no significant changes in drive-by shootings and homicides in the control beat and the target's neighboring beats. Furthermore, neither the target nor the control areas showed any significant changes in non-gun-related offenses (Sherman, Shaw, & Rogan, 1995; National Institute of Justice, 1995; Braga, 2001; Braga, 2006). Additionally, an improvement of citizens' satisfaction with the police was also shown when measured before and after the intervention during the 29 week-experiment (Shaw, 1995).

Based on the findings of this study, the outcome objectives were partially met. One outcome objective was to reduce gun-related crimes. The findings show that this objective was met. Evidently, the number of gun crimes (per 1,000 persons) in the target beat decreased from 37% to 18.9%, at the same time, the number of guns seized (per 1,000 persons) increased from 9.9% to 16.8% in the target beat. Comparatively, the number of gun crimes (per 1,000 persons) in the comparison beat went up by 1%, while the number of guns seized (per 1,000 persons) went down from 10.4% to 8.8% (see Exhibit 1, p. 1 in National Institute of Justice, 1995).

The tactics that were used to seize the guns were meant to satisfy the second outcome objective. That is, through enforcement of existing laws against carrying concealed illegal weapons (by implementing specific police tactics) the police would be able to seize guns and thus reduce the number of gun-related crimes. This outcome objective was partially achieved. The data shows that the police seized illegal guns, but not all police tactics proved to be effective in maximizing the number of guns seized. For instance, door-to-door gun patrols did not prove to be effective. Also police special training in the body language was thought to enhance police ability to recognize persons who might be carrying weapons. But it did not help increase the number of guns seized, so as such it was unsuccessful (National Institute of Justice, 1995; Sherman & Rogan, 1995). On the other hand, traffic stops (listed as one of the means to achieve the second objective) showed to be the most productive in finding illegal guns (National Institute of Justice, 1995).

Overall, this study suggests that a small increase in the number of guns seized can have a substantial impact on the percentage of gun crimes. An important secondary conclusion is that the "police can increase the numbers of guns seized in high gun crime areas at relatively modest cost" (National Institute of Justice, 1995, p. 9). However, since this experiment was designed to test the hypothesis that gun seizures and gun-related crime are inversely related, it could not eliminate all alternative explanations of the results (a lot of intervening variables) and could therefore not prove that an increase of gun seizures results in reduced gun crime. Thus, regardless of the positive results, the conclusions are questionable.

Pittsburgh Firearm Suppression Patrol Program

In 1998, the Police Department in the City of Pittsburgh, Pennsylvania, launched the Firearm Suppression Patrol (FSP) program. The purpose of this program was to confiscate as many firearms as possible through directed patrol effort. This program was intended to be implemented in selected high-crime areas in the City of Pittsburgh. The unique aspect of this program was that the police patrols were launched on some days of the week

(Wednesday through Sunday) and not on the others. The major question this program was designed to answer was: How can the police prevent young men from shooting one another? The assumed answer to this question was that if the police increases the risks of carrying guns illegally, then it would have a deterrent effect on future firearm crimes. In other words, the goal of this program was to deter high-risk people from carrying or misusing guns in public places through targeted patrols (to proactively searching for illegally carried guns). This experimental study attempted to evaluate the effectiveness of the FSP program. The research question that this experimental study sought to answer was: How effective is the Firearm Suppression Patrol program in preventing the misuse of firearms by young people? (Cohen & Ludwig, 2003). The Pittsburgh program was constructed to proactively confiscate illegal firearms, and it was also constructed with the concern of not violating individuals' rights while maintaining the police-community relationship. Special attention was given to the guidelines issued to the police about pat-down safety frisks as they were searching for illegal firearms.

Methodologically, this was a quasi-experimental design with a treatment and a non-equivalent control group. The treatment group included the areas that the program was implemented in, and the control area included areas of the city that the authors could use to compare the trends in crime rates between the treatment and control areas (before and after the police patrols were launched). The comparison was focused on gun misuse during the on-days (Wednesday through Sunday) in the treatment and the control areas. The data on "shots fired" for this study was obtained from Pittsburgh's 911 Emergency Operation Center. This data allowed the researchers to determine whether the incidents occurred in the treatment zone or the control zone. And the outcome measure was strictly focused on measures that captured illegal carrying and criminal misuse of firearms in the City of Pittsburgh. The duration of this quasi-experiment was six weeks long (Cohen & Ludwig, 2003). The effectiveness of the FSP program was done based on the analysis of the data (comparison of the trends in crime rates) that were collected during the six weeks of the treatment and fourteen weeks of post-treatment.

The findings of this study indicated that the gun assault injuries declined significantly in treatment zone. Furthermore, the findings of this study showed that targeted policing program against carrying illegal firearms, according to the authors, "may have reduced shots fired by 34 percent and gunshots injuries [hospital-treated assault gunshot injuries] by as much as 71 percent in the targeted areas" (Cohen & Ludwig, 2003, p. 238).

Overall, this study suggests that targeted policing program (proactively searching for illegally carried guns) appears to be effective in reducing/discouraging illegal gun carrying in public places and thus reduces gun injuries. If properly implemented (and if the resources are available), programs such as FSP have a deterrent affect on crime and criminal behavior and therefore they work.

Washington D. C. Repeat Offender Project

In 1982, the Metropolitan Police Department of Washington, D. C. created a Repeat Offender Project (ROP) aimed at increasing the rate of apprehending repeat offenders. The purpose of this project was to proactively identify repeat offenders. To test the effectiveness of ROP project (whether ROP increased the likelihood of arrest for targeted repeat offenders), the Metropolitan Police Department of Washington, D. C. launched a field quasi-experimental study. This experimental study focused on three fundamental questions: (1) How did assignment to ROP affect the officers' arrest productivity? (2) Did

the offenders that were arrested by ROP have longer and more serious criminal histories? And (3) Were ROP officers' arrestees more likely to be prosecuted, convicted and incarcerated than offenders arrested under routine police operations? The theoretical justification of this experimental study was based on the fact that "a small proportion of criminals commit a disproportionate number of crimes" (Martin & Sherman, 1986, p. 7); thus, it is necessary for the criminal justice system to focus its resources on the most active and dangerous chronic offenders. By adopting a proactive targeting approach to apprehend repeat offenders, the system would take away the capacity of repeated offenders to commit further/future crimes. This is consistent with the incapacitation theory (Martin & Sherman, 1986).

Methodologically, this was a quasi-experiment with a nonequivalent control group. The control group (which included several groups of police officers) was used to compare the number and seriousness of the arrests made by the ROP group (the experimental group or the proactive group of police officers). The criterion for selecting targets (repeat offenders) was to arrest persons who were believed to have committed five or more Part I offenses per week. The sample size in this experimental study was about 500 sworn officers. They were randomly assigned to the experimental group and the control group. Additionally, there were two types of offenders they were looking for. They were categorized as "warrant targets" (those who already been wanted by the police) and ROP-initiated targets. These two categories then were randomly assigned (by coin toss) to experimental group and control group, to be investigated. However, since this criterion was difficult to be met, it was left up to the ROP officers to determine target selection. The repeat offenders were mostly identified by undercover work. The duration of the experimental study was two years. During this time, there were 212 pairs of randomly assigned targets investigated (Martin, 1986; Martin & Sherman, 1986).

The findings of this study showed that Repeat Offender Project was effective in partially accomplishing its goal. Thus, ROP substantially increased the likelihood of arrest of the persons it targeted – repeat offenders (or career/chronic criminals). Those offenders who were arrested by ROP officers had longer and more serious prior arrests histories than a sample of those arrested by other non-ROP officers. ROP officers did not, however, make as many arrests as non-ROP officers, but arrests made by ROP officers included more serious repeat offenders (Martin, 1986; Martin & Sherman, 1986). After all, their focus was on making quality arrests; that means, only arresting those chronic offenders.

Overall, this study suggests that larger police departments, if not all police departments, would benefit from proactive repeat offender units such as ROP. Since the results show that ROP increased the likelihood of arrest of targeted repeat offenders, the program is considered as promising in preventing crime. However, proactive police interventions – programs such as ROP – should address specific local problems while considering the departmental resource.

Richmond Second Response Program

In 1998, the Police Department in Richmond, Virginia, in collaboration with Police Foundation, conducted a quasi-experimental study attempting to test the effectiveness of The Second Responder Program (SRP). Specifically, this experimental study evaluated whether the program actually reduced domestic victimization. The purpose of this SRP program was to educate or encourage victims of domestic violence to seek help when

needed. The program itself was in principal a partnership between the Richmond Police department and the Department of Social Services. In essence, this was a victim re-contact program, thought to be a proactive approach involving the police and social services in reducing domestic violence. This victim re-contact strategy that SRP ran was an attempt to reduce fear of repeat-crimes following victimization (Greenspan, Weisburd, Lane, Ready, Crossen-Powell, & Booth, 2005).

Methodologically, this was a quasi-experimental design with non-equivalent control group. Of the four precincts, two of them were assigned to the treatment group and the remaining two precincts were assigned to the control group. According to the police records, the difference between the treatment groups and the control groups was not statistically significant. "The evaluation of the SRP program was based on two waves of interviews" (Greenspan, Weisburd, Lane, Ready, Crossen-Powell, & Booth, 2005). The first-wave interviews were conducted within five days of the domestic violence incident; and the second-wave interviews were conducted after six months elapsed from the first domestic violence incident (after the first police intervention) (Greenspan et al., 2005).

The findings of this experimental study showed that the victims of domestic violence reported more positive attitudes toward the police and strongly recommended (79%) SRP intervention in their own situation. Only 12% of the victims expressed their dissatisfaction with the program. As mentioned earlier, the goal of SRP was not only to change women's perceptions about the police service but also to prevent re-victimization. Consequently, the subjects in the experimental group reported that they experienced less abuse than the subjects in the control group during the six months after the first intervention. (Greenspan, Weisburd, Lane, Ready, Crossen-Powell, & Booth, 2005). However, to determine whether this type of program works or doesn't work, the authors suggested that more research is needed.

Overall, this study suggests that the police performance is better when social workers are present and that women who receive an immediate social service response at the time of the incident may experience less chances of repeated violence.

Redlands Second Response Program

In 2007, following the Richmond's experimental study, the Police Foundation sponsored another randomized experimental study to further test the effectiveness of The Second Response Program (SRP). The study, at this time, took place in Redlands, California. As mentioned earlier, the purpose of this program was to educate victims of domestic violence about the options they had when faced with domestic violence and to connect them with counseling, relocation, civil legal assistance, and other services that can help them reduce their dependency on the abusers. Additionally, the second response officers offered practical assistance by working with the victims of domestic violence to develop safety plans (Davis, Weisburd, & Hamilton, 2007).

Methodologically, the study was a randomized experimental design, with the experimental and control group. The units of analysis were the households who reported domestic incidents. Thus, the police intervention in this program was focused on the type of offense (domestic incidents). Furthermore, there were three experimental conditions to which the households were randomly assigned to: (1) second responders were dispatched to the crime scene within twenty-four hours; (2) second responders visited victims' homes one week after the call for service; and (3) no second response occurred (the control group) (Davis, Weisburd, & Hamilton, 2007).

The findings of this study indicated that the one-day response (second responders that were dispatched to the crime scene within twenty-four hours) generated more new incidents (about 32 percent more) compared to the seven-day response group (about 23 percent). In other words, the two second response groups combined together (one day and after seven days) generated more new incidents (28 percent) compared to the control group (24 percent). Based on this fact alone, it can be seen that The Second Response Program (SRP) is ineffective in preventing domestic violence, despite the fact that the results were not statistically significant. The only positive outcome of this study, in favor of SRP, is the fact that “victims in the second response group [contacts made with the victims after seven days] were somewhat more likely to report having seen the abuser since the original incident” (Davis, Weisburd, & Hamilton, 2007, p. 6). In other words, the reporting behavior towards the police increased.

Overall, this study suggests that there is no evidence (statistically significant evidence) that the intervention offered by SRP helps reduce domestic victimization. In fact, the evidence this study produced suggests that “the intervention increased abusive incidents” (Davis, Weisburd, & Hamilton, 2007, p. 7). The findings of Redlands’s experimental study produced some contradicting evidence about the effectiveness of SRP compared to that of Richmond’s study discussed above.

Results – Comparative Analysis

Table 1 below summarizes eight research studies used to determine the effectiveness of the three dimensions of targeted policing; namely, place-specific, offender-specific, and offense-specific. There were four place-specific studies (Kansas City Gun Experiment, Jersey City Drug Market Analysis Program, Minneapolis Hot Spots Policing Program, and Pittsburgh Firearms Suppression Program with SMS scores level 3 and above) that showed the effectiveness of police tactics and strategies in dealing with place-specific crimes. One experimental study, included in this paper (Repeat Offender Project, SMS level 4), tested offender-based police tactics. The results of this study showed that these types of police tactics are “promising;” but more studies needed to conclude that they are effective. And lastly, two studies included in this paper were offense-based, with focus on domestic victimization (Second Response Programs, SMS level 3 and level 5). This review shows that SRP strategies produced mixed results.

The effectiveness of targeted policing, as a proactive policing approach, according to the findings of the eight research studies included in this paper, is confirmed. That is, based on the aggregate results of these eight research studies and the SMS scores that each one of these studies received, we can conclude that there is enough empirical evidence to identify targeted policing among other crime prevention tactics as “working.” Furthermore, based on the aggregate results (see Table 1), it is evident and perhaps reasonable to suggest that the government has good reasons to continue implementing targeted policing programs because as strategies and yet as a set of on-going proactive tactics, targeted policing can reduce crime and it has a positive impact on citizens’ feeling of safety.

Table 1. Experimental Studies that Have Evaluated Targeted Policing

Study	Place	Duration of the Study	Research Question(s)	SMS Score	Major Findings
Kelling et al., (1974)	Kansas City	1 year	Is preventive patrol effective? What effects has police visibility on residents' feelings of safety?	5	Proactive police patrol has little or no effect on preventing crime or making residents feel safer.
Sherman, Shaw, & Rogan, (1995)	Kansas City	29 weeks	Does removing guns off the streets reduce gun-related crimes?	3	A small increase in guns seized can have a substantial impact on gun-related crimes.
Weisburd & Green, (1995)	Jersey City	15 months	Does a proactive police approach work better in dealing with drug-related crimes?	5	The number of public disorder calls for suspicious persons, drug-related activities, and other public moral-related crimes decreased.
Sherman & Weisburd. (1995)	Minneapolis	12 months	Does increased police presence (frequency of proactive police patrols) in crime-prone areas reduce crime rates?	5	Frequent police directed-patrols (frequent rotation of police patrols in crime-prone areas, 15 minutes or less) have deterrent effect on crime.

Cohen & Ludwig, (2003)	Pittsburgh	6 weeks	Does increased risk of carrying guns illegally have deterrent effect on firearm-related crimes?	3	Proactively confiscating illegal firearms reduced “shots fired” by 34 percent and gun injuries by 71 percent.
Martin & Sherman, (1986)	Washington, DC	2 years	Can the proactive police units substantially increase the likelihood of arresting repeat-offenders?	4	Repeat Offender Project (ROP) was partially effective in arresting repeat-offenders.
Greenspan et al., (2005)	Richmond	6 months	Can a proactive police intervention reduce domestic victimization?	3	Victims reported more positive attitudes toward the police. Positive results but more research needed.
Davis, Weisburd, & Hamilton, (2007)	Redlands	6 months	Can a proactive police intervention reduce domestic victimization?	5	The Second Response Program was ineffective in reducing domestic victimization.

Discussion and Conclusion

In this paper, eight experimental studies have been evaluated to understand the effectiveness of targeted policing. Essentially, in this paper the researcher has included studies that have evaluated three dimensions of targeted policing as a proactive crime prevention approach; namely, place-specific, offender-specific, and offense specific. All studies that have been included for review in this paper have something in common; they

attempt to answer one question: Does proactive crime prevention approaches such as place-specific, offense-specific and offender specific reduce crime?

Of the eight experimental studies evaluated in this comparative study, three of them focused on proactive police patrols in crime-prone areas. That is, this crime prevention strategy operates under the assumptions that police visibility and frequency of police patrols in high-crime areas (hot spots) will intercept the crime triangle (as explained by routine activities theory) and as such it will have a positive effect in reducing crime rates. Two studies evaluated police effectiveness in preventing crime by removing guns off the streets. The general idea of this proactive police approach (in dealing with firearm-related crimes) was that by confiscating illegal guns through intensive police patrol, the police will increase the risk of carrying guns illegally; thus, discouraging those offenders who might potentially carry guns illegally. Hence, if the offenders do not possess firearms, no crime would occur, or no crimes that involve the use or misuse of firearms would occur (as explained by incapacitation and rational choice theories). Two other studies included in this review dealt with police proactive intervention in reducing domestic victimization. The main purpose of this crime prevention tactic was (through a proactive intervention) to reduce the fear of crime and increase citizens' satisfaction with the police, making them more inclined to come forward and report crimes to the police. One study evaluated a proactive police strategy that was aimed at proactively identifying repeat offenders. As mentioned earlier, similarly to the crime places, a small number of offenders commit a disproportionate number of crimes; thus, by proactively identifying and arresting them, there would be a decrease in crime rates (as explained by incapacitation theory).

The aggregate results of these eight studies suggest that targeted policing becomes more effective when it is implemented using: (1) crime analysis to identify hot-crime areas or "hot spots;" and high-risk offenders (repeat offenders); and (2) by clearly defining intervention strategies that target specific offenses and specific offenders at specific locations at specific times. Based on the SMS rating score for each study (see Table 1), it appears that we have sufficient evidence to conclude that targeted policing as a proactive crime prevention approach works. As a set of proactive police tactics and strategies, targeted policing meets the criteria defined by the researchers who developed the evaluation scale (SMS) to evaluate what works, what doesn't work, and what's promising. In fact, we have more than two level three studies that support this conclusion. Furthermore, based on the aggregate results of these eight experimental studies (included in this paper), it is reasonable to recommend, and in fact, embrace targeted policing as a successful crime fighting strategy and it should be replicated nationwide because it is a form of cost-effective policing that works and that is empirically supported. Crime prevention strategies that are evidence-based are rational hence they suggest using available police resources wisely. Additionally, those police agencies that implement targeted policing – an evidence-based police practice – should continuously evaluate police tactics and strategies for their effectiveness (i.e., what works and what doesn't work), and by eliminating those that do not work, the police resources can be allocated to maintain or increase the use of police strategies that work or develop new police tactics and strategies.

References

Agnew, R. (2005). *Why do criminals offend? A general theory of crime and delinquency*. Los Angeles, CA: Roxbury.

- Akers, R. (1990). Rational choice, deterrence, and social learning theory in criminology: Path not taken. *The Journal of Criminal Law and Criminology*, 81, 653-676.
- Barker, T. E., & Wolfer, L. (2003). The crime triangle: Alcohol, drug use, and vandalism. *Police practice and Research*, 4(1), 47-61.
- Bennett, T. (1986). Situational crime prevention from the offender's perspective. In K. Heal & G. Laycock. (Eds.), *Situational crime prevention: From theory into practice*. London, UK: Majesty's Stationery Office.
- Bohm, R. M., & Haley, K. N. (1997). *Introduction to criminal justice*. Westerville, OH: McGraw-Hill.
- Braga, A. (2001). The effects of hot spots policing on crime. *ANNALS of the American Academy of Political Science*, 578, 104-125.
- Braga, A. (2006). The crime prevention value of hot spots policing. *Psicothema*, 18, 630-637.
- Braga, A., Weisburd, D., Waring, E., Green, L., Spelman, W., & Gajewski, F. (1999). Problem-oriented policing in violent crime places: A randomized controlled experiment. *Criminology*, 37, 541-580.
- Clark, R. V. (1997). *Situational crime prevention: Successful case studies* (2nd ed.). Guilderland, NY: Harrow and Heston.
- Cohen, L. E., & Felson, M. (1979). Social change and crime rate trends: A routine activity approach. *American Sociological Review*, 44, 588-608.
- Cohen, J., & Ludwig, J. (2003). Policing crime guns. In J. Ludwig & P. J. Cook (Eds.), *Evaluating Gun Policy* (pp. 217-250). Washington, DC: Brookings Institution.
- Cordner, G., & Perkins, E. B. (2005). Problem-oriented policing in practice. *Criminology & Public Policy*, 4(2), 155-180.
- Cornish, D., & Clarke, R. V. (1986). *The reasoning criminal: Rational choice perspective on offending*. New York: Springer-Verlag.
- Cullen, F. T., & Agnew, R. (2006). *Criminological theory: Past to present*. Los Angeles: Roxbury.
- Davis, R. C., Weisburd, D., & Hamilton, E. E. (2007). *Preventing repeat incidents of family violence: A randomized field test of a second responder program in Redlands, California*. Washington, DC: Police Foundation.
- Farrington, D. P., Gottfredson, D. C., Sharman, L. W., & Welsh, B. C. (2002). The Maryland scientific methods scale. In L. W. Sherman, D.P. Farrington, B.C. Welsh, & D. L. MacKenzie (Eds.), *Evidence-Based Crime Prevention* (pp. 13-22). New York: Routledge.
- Fischer, B. J. (1998) *Community policing: A study of local policing, order and control*. Unpublished doctoral dissertation, University of Toronto, Canada.
- Greenspan, R., Weisburd, D., Lane, E., Ready, J., Crossen-Powell, S., & Booth, W. C. (2005). *Richmond's second responders: Partnering with police against domestic violence*. Washington, DC: Police Foundation.
- Kelling, G. L., Pate, T., Dieckman, D., & Brown, C. E. (1974). The Kansas City preventive patrol experiment: A summary report. In D. H. Bayley (Ed.), *What works in policing* (pp. 339-356). New York: Oxford University Press.
- Koper, C. (1995). Just enough police presence: Reducing crime and disorderly behavior by optimizing patrol time in crime hot spots. *Justice Quarterly*, 12, 649-672.
- Laub, S. P. (2004). *Crime prevention approaches, practices and evaluation* (5th ed.). Cincinnati, OH: Anderson.

- Leighton, B. (1993). Visions of community policing: Rhetoric and reality in Canada. *Canadian Journal of Criminology*, 33(4), 485-522.
- Lilly, R. J., Cullen, F. T., Ball, R. A. (1995). *Criminological theory: Context and consequences* (2nd ed.). Thousand Oaks, CA: SAGE Publications, Inc.
- _____. (2006). *Criminological theory: Context and consequences* (4th ed.). Thousand Oaks, CA: SAGE Publications, Inc.
- MacKenzie, D. L. (2000). Corrections and sentencing in the 21st century: Evidence-based corrections and sentencing, *The Prison Journal*, 81 (3), 299-312.
- _____. (2006). *What works in correction? Reducing the criminal activities of offenders and delinquents*. New York: Cambridge University Press.
- Marcinkowski, J. (1998). *A brief history of the Schenectady police department*. Retrieved May 13, 2008, from <http://www.schenectadypd.com>.
- Martin, S. E. (1986). Policing career criminals: An examination of an innovative crime control program. *The Journal of Criminal Law and Criminology*, 77, 1159-1182.
- Martin, S. E., & Sherman, L. (1986). *Catching career criminals: The Washington, DC, repeat offender project*. Washington, DC: National Institute of Justice.
- Miller, L. S., Hess, K. M. (1994). *Community policing: Theory and practice*. St. Paul, MN: West Publishing Company.
- Miller, M. M., Schreck, C. J., & Tewksbury, R. (2006). *Criminological theory: A brief introduction*. Boston, MA: Pearson Education, Inc.
- Purpura, P. (1996). *Criminal Justice: An introduction*. Boston, MA: Butterworth-Heinemann.
- Satz, D., & Ferejohn, J. (1994). Rational choice and social theory. *The Journal of Philosophy*, 91, 71-87.
- Shaw, J. (1995). Community policing against guns: Public opinion of the Kansas City gun experiment. *Justice Quarterly*, 12, 695-710.
- Sherman, L. W. (1995). Hot spots of crime and criminal careers of places. In J. E. Eck & D. Weisburd (Eds.), *Crime and place: crime prevention studies* (pp. 35-52). Monsey, NY: Willow Tree Press.
- Sherman, L. W. (1998). *Ideas in American policing: Evidence-based policing*. Washington, DC: Police Foundation.
- Sherman, L. W. (1992). *Policing domestic violence*. New York: Free Press.
- Sherman, L. W., Farrington, D.P., Welsh, B.C., & MacKenzie, D. L. (2002). *Evidence-Based Crime Prevention*. New York: Routledge.
- _____. (2006). *Evidence-Based Crime Prevention* (Revised Edition). New York: Routledge.
- Sherman, L. W., Gartin, p., & Buerger, M. (1989). Hot spots of predatory crime: Routine activities and criminology of place. *Criminology*, 27, 27-56.
- Sherman, L. W., Gottfredson, D. C., MacKenzie, D. L., Eck, J., Reuter, P., & Bushway, S. D. (1997). *Preventing crime: What works, what doesn't work, and what's promising*. Washington, DC: National Institute of Justice.
- Sherman, L. W., Shaw, J. W., & Rogan, D. P. (1995). *The Kansas City gun experiment*. Washington, DC: National Institute of Justice.
- Sherman, L. W., Schmidt, J. D., Rogan, D. P., Gartin, P. R., Cohn, E. G., Collins, D. J., & Bacich, A. R. (1992). The variable effects of arrest on criminal careers: The Milwaukee domestic violence experiment. *Journal of Criminal Law and Criminology*, 83, 137-169.

- Sherman, L. W., & Weisburd, D. (1995). General deterrence effects of police patrol in crime “hot spots:” A randomized controlled trial. *Justice Quarterly*, 12, 626-648.
- Welsh, B. C., & Farrington, D. P. (2005). Evidence-based crime prevention: Conclusions and directions for a safer society. *Canadian Journal of Criminology and Criminal Justice*, 47(2), 337-354.
- Weisburd, D., & Braga, A. (2006). Hot Spots Policing as a Model for Police Innovation. In D. Weisburd & A. Braga (Eds.), *Police Innovation: Contrasting Perspectives* (pp. 225-244). Cambridge, UK: Cambridge University Press.
- Weisburd, D. L., & Green, L. (1995). Policing drug hot spots: The Jersey City drug market analysis experiment. *Justice Quarterly*, 12, 711-736.
- Williams, F. P., & McShane, M. D. (1994). *Criminological theory* (2nd ed.). Englewood Cliffs, NJ: Prentice-Hall, Inc.