EFFECTS OF PROBLEM-ORIENTED POLICING ON CRIME AND DISORDER

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1 Background for the Review

Problem-oriented policing has garnered a great deal of attention since it was first proposed by Herman Goldstein in 1979. The core of the model is a shift from police operating in a reactive, incident driven way (primarily responding to calls for service) to a model that requires the police to be proactive in identifying underlying problems that can be targeted to alleviate crime and disorder at their roots.

The model was further articulated by Eck and Spelman (1987) whose work in Newport News produced the SARA model. SARA is an acronym representing four steps they suggest police should follow when implementing problem-oriented policing. “Scanning” is the first step, and involves the police identifying and prioritizing potential problems in their jurisdiction that may be causing crime and disorder. After potential problems have been identified, the next step is “Analysis.” This involves the police analyzing the identified problem(s) so that appropriate responses can be developed. The third step, “Response,” has the police developing and implementing interventions designed to solve the problem(s). Finally, once the response has been administered, the final step is “Assessment” which involves assessing the impact of the response on the targeted problem(s).

A 2004 report from the National Research Council offered the following description of problem-oriented policing and how the SARA model works in practice.

The heart of problem-oriented policing is that this concept calls on police to analyze problems, which can include learning more about victims as well as offenders, and to consider carefully why they came together where they did. The interconnectedness of person, place, and seemingly unrelated events needs to be examined and documented. Then police are to craft response that may go beyond traditional police practices … Finally, problem-oriented policing calls for police to assess how well they are doing. Did it work? What worked, exactly? Did the project fail because they had the wrong idea, or did they have a good idea but fail to implement it properly? (Committee to Review Research, 2004: 91)

Past reviews have concluded that research is consistently supportive of the capability of problem solving to reduce crime and disorder (e.g. Weisburd and Eck, 2004; Committee to Review Research, 2004). A number of quasi-experiments going back to the mid-1980s consistently demonstrates that problem solving can reduce fear of crime (Cordner, 1986), violent and property crime (Eck and Spelman, 1987), firearm-related youth homicide (Kennedy et al., 2001) and various forms of disorder, including prostitution and drug dealing (Capowich and Roehl, 1994; Eck and Spelman, 1987; Hope, 1994). For example, a quasi-experiment in Jersey City, New Jersey, public housing complexes (Green-Mazerolle et al., 2000) found that police problem-solving activities caused measurable declines in reported violent and property crime, although the results varied across the six housing complexes studied. In another example, Clarke and Goldstein (2002) report a reduction in thefts of appliances from new home

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4 This section borrows heavily from Weisburd and Eck (2004).
Two experimental evaluations of applications of problem solving in hot spots suggest its effectiveness in reducing crime and disorder. In a randomized trial with Jersey City violent crime hot spots, Braga et al. (1999) report reductions in property and violent crime in the treatment locations. While this study tested problem-solving approaches, it is important to note that focused police attention was brought only to the experimental locations. Accordingly, it is difficult to distinguish between the effects of bringing focused attention to hot spots and that of such focused efforts being developed using a problem-oriented approach. The Jersey City Drug Market Analysis Experiment (Weisburd and Green, 1995) provides more direct support for the added benefit of the application of problem-solving approaches in hot spots policing. In that study, a similar number of narcotics detectives were assigned to treatment and control hot spots. Weisburd and Green (1995) compared the effectiveness of unsystematic, arrest-oriented enforcement based on ad hoc target selection (the control group) with a treatment strategy involving analysis of assigned drug hot spots, followed by site-specific enforcement and collaboration with landlords and local government regulatory agencies, and concluding with monitoring and maintenance for up to a week following the intervention. Compared with the control drug hot spots, the treatment drug hot spots fared better with regard to disorder and disorder-related crimes.

Evidence of the effectiveness of situational and opportunity-blocking strategies, while not necessarily police based, provides indirect support for the effectiveness of problem solving in reducing crime and disorder. Problem-oriented policing has been linked to routine activity theory, rational choice perspectives, and situational crime prevention (Clarke, 1992a, 1992b; Eck and Spelman, 1987). Recent reviews of prevention programs designed to block crime and disorder opportunities in small places find that most of the studies report reductions in target crime and disorder events (Eck, 2002; Poyner, 1981; Weisburd, 1997). Furthermore, many of these efforts were the result of police problem-solving strategies. We note that many of the studies reviewed employed relatively weak designs (Clarke, 1997; Weisburd, 1997; Eck, 2002).

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5 A systematic review of “hot spots policing” has been conducted by Anthony Braga (2001). Hot spots policing focuses on small geographic areas and concentrations of crime. Hot spots policing per se does not demand detailed analysis of the problem identified and often relies on a law enforcement response. Problem-oriented policing can focus on small geographic areas (hot spots); however, further analysis is undertaken to determine the creation of the hot spot and responses are tailored to the needs of each hot spot. Further, problem-oriented policing also examines non-geographic concentrations of crime – repeat offenders, repeat victims, hot products, and so forth. In short, while problem-oriented policing at hot spots can be considered a type of problem-oriented policing, many hot spots policing programs do not use the more systematic methods associated with problem-oriented policing.
2 Objectives of the Review

The objective of this systematic review is to synthesize the extant empirical evidence (published and unpublished) on the effects of problem-oriented police on crime and disorder. Specifically, this review will seek to answer the following questions: Is problem-oriented policing effective in reducing crime and disorder? Does problem-oriented policing have differential impacts across different types of crime and disorder? Do specific types of problem-oriented policing approaches have different effects on crime and disorder? As such, the primary question of this review is concerned with crime and disorder outcomes of problem-oriented policing. Nonetheless, when data are available we will collect information on cost effectiveness of problem-oriented policing programs or other secondary outcomes such as its impacts on police legitimacy.

3 Methods

3.1 Criteria for inclusion and exclusion of studies in the review

The scope of this review is experimental and quasi-experimental studies including pre-post evaluations of problem-oriented policing. The preliminary eligibility criteria are as follows:
1. The study must be an evaluation of a problem-oriented policing intervention. For this it is necessary to develop an operational definition of problem-oriented policing. For this review, only police interventions following the basic tenets of the SARA model outlined above will be eligible for inclusion. This is to say that such interventions must involve the identification of a problem believed to be related to crime and/or disorder outcomes, the development and administration of a response specifically tailored to this problem and an assessment of the effects of the response on a crime or disorder outcome.
2. The study must include a comparison group (or a pre-intervention comparison period in the case of pre-post studies) which did not receive the treatment condition (problem-oriented policing).
3. The study must report on at least one crime/disorder outcome.
4. The study may deal with problem areas or problem people. However, these are different units of analysis and we will use caution in developing overall estimates of effect sizes across studies. For overall description of the studies we will likely include effects across studies. However, in formal meta analyses we will likely separate out studies on places from those that use individuals as units of analysis.

3.2 Search strategy for identification of relevant studies

Several strategies will be used to perform an exhaustive search for literature fitting the eligibility criteria. First, a key word search will be performed on an array of online abstract databases (see lists of keywords and databases below). Second, we will review the bibliographies of past reviews of problem-oriented policing. Third, we will...
perform forward searches for works that have cited seminal problem oriented policing studies. Fourth, we will perform hand searches of leading journals in the field. Fifth, we will search the publications of several research and professional agencies (see list below). Sixth, after finishing the above searches and reviewing the studies as described later, we will e-mail the list to leading policing scholars knowledgeable in the area of problem-oriented policing. These scholars will be defined as those who authored two or more studies that appear on our inclusion list as well as anyone on the list of affiliates of the POP Center (http://popcenter.org/aboutCPOP.html). This is likely to identify studies the above searches missed as these experts may be able to refer us to studies we may have missed, particularly unpublished pieces such as dissertations. Finally, we will consult with an information specialist at the outset of our review and at points along the way in order to ensure that we have used appropriate search strategies.

The following databases will be searched:

1. Criminal Justice Periodical Index  
2. Criminal Justice Abstracts  
4. Sociological Abstracts  
5. Social Science Abstracts (SocialSciAbs)  
6. Social Science Citation Index  
7. Dissertation Abstracts  
9. Police Executive Research Forum (PERF) database of problem-oriented policing examples (POPNet)  
10. C2 SPECTR (The Campbell Collaboration Social, Psychological, Educational and Criminological Trials Register)  
11. Australian Criminology Database (CINCH)  
12. Centrex (Central Police Training and Development Authority)- UK National Police Library

The publications of the following groups will be searched:

1. Center for Problem-Oriented Policing (Tilley Award and Goldstein Award winners)  
2. Institute for Law and Justice  
3. Community Policing Consortium (electronic library)  
4. Vera Institute for Justice (policing publications)  
5. Rand Corporation (public safety publications)

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6 The seminal pieces that will be used here are: Goldstein, 1979; Goldstein, 1990; Spelman and Eck, 1987; Eck and Spelman, 1987; Braga et al., 1999.

6. Police Foundation

The following agencies’ publications will be searched and the agencies will be contacted if necessary:

1. Home Office (United Kingdom)
2. Australian Institute of Criminology
3. Swedish Police Service
4. Norwegian Ministry of Justice and the Police
5. Royal Canadian Mounted Police
6. Finnish Police (Polisi)
7. Danish Natoinal Police (Politi)
8. The Netherlands Police (Politie)
9. New Zealand Police

The following keywords will be used to search the databases listed above (in all cases where police is listed we would also use policing):

1. “Problem-oriented policing”
2. Police AND “problem solving”
3. SARA model
4. Police AND SARA
5. Police AND scanning
6. Police AND analysis
7. Police AND “problem identification”
8. Police AND identify AND problem
10. POP

Several strategies will be used to obtain full-text versions of the studies found through searches of the various abstract databases listed above. First, we will attempt to obtain full-text versions from the electronic journals available through the University of Maryland library research port. When electronic versions are not available, we will use print versions of journals available at the library. If the journals are not available at the University of Maryland library, we will make use of the Interlibrary Loan Office (ILL) to try to obtain the journal from the libraries of other area schools. If these methods do not work, we will contact the author(s) of the article and/or the agency that funded the research to try to get a copy of the full-text version of the study.

3.3 Description of methods used in the component studies

The studies included in this review will use methodologies that are variations of a treatment versus comparison group research designs with a post-test measure. Some studies may have additional follow-up comparisons. The unit of analysis will be “problems” variously identified. In general the outcomes will be drawn from data in geographic areas of varying size (possibly ranging from as small as street...
segments/blocks to as large as whole police districts or even cities). The studies will also vary in their method of assignment to treatment and comparison areas. A small number may use randomized methods to assign areas to groups. Quasi-experiments in which a handful of areas are assigned to treatment or control by a police department and/or research team (or where comparison areas are chosen after the fact) will be more common. Additionally, studies may use pre-post designs in which there are no geographical comparison areas as the pre-intervention time period in the target site is used as the comparison.

All eligible studies will include a post-intervention measure of crime and disorder. These can include measures of overall crime/disorder, or measures of individual categories of crime/disorder (i.e. homicide or robbery). These measures will largely be obtained from official police data such as calls for service, arrests and/or crime incident reports. However, it is possible that some studies may use alternative measures such as researcher observations of crime/disorder or self-report measures of crime/delinquency. We do not expect to find many studies that allow for a cost benefit analysis, though this will not be known until the review is conducted. Other outcome measures such as fear of crime, citizen attitudes toward police etc. may be measured in the studies though they are not generally primary outcomes of problem-oriented policing.

Finally, due to the much weaker methods involved in pre-post studies, these will be analyzed separately from the experimental and quasi-experimental studies. Additionally, as will be discussed below, we have reason to expect a greater risk of publication bias for pre-post studies which further precludes combining them in one analysis with the more methodologically rigorous studies.

3.4 Criteria for determination of independent findings

It is possible that some studies will report multiple findings on different outcomes and/or different samples. In the case of independent samples, the results will be treated as separate findings and all such results will be included in the analysis. An example of this would be a study reporting on the effects of problem-oriented policing on crime in multiple target sites. Other studies may report on multiple crime/disorder outcomes in the same target site. For cases such as this with multiple findings from the same sample, each will be examined independently to decide how to either combine the findings or to choose the one that best represents the study. It is likely that most interventions will be designed to deal with a specific problem, but some may also target some secondary problems and report outcomes for these as well. In these cases the effect size for the primary problem will be reported.

However, some studies will likely have multiple primary outcomes. For example, one POP program may have been designed to deal with three specific problems and thus report outcomes for each of these problems. Analyzing these separately would clearly lead to problems regarding statistical dependence of outcomes. As such, we will code a maximum of three primary outcomes, with the criteria of choosing the maximum, moderate/median effect size and minimum effect size to offer flexibility in calculating an overall effect size for such studies. The same strategy will be used for any studies reporting the same outcome multiple times with different types of data (i.e. a study evaluating the impact of a POP program on robbery may report the outcome measured by
robbery incidents, arrests and calls for service). Finally, some studies may involve multiple sites—i.e. POP program is being delivered by one police department/taskforce to specific problems in multiple areas within a city. Such cases will be treated as one study with sub units, and independent effect sizes for primary outcomes will again be created in the same manner as above.

3.5 Details of study coding categories

All eligible studies will be coded (see coding protocol attached in Appendix A) on a variety of criteria (including details related to them) including:

a. Reference information (title, authors, publication etc.)
b. Nature of description of selection of site, problems etc.
c. Nature and description of selection of comparison group or period
d. The unit of analysis
e. The sample size
f. Methodological type (randomized experiment, quasi-experiment or pre-post test)
g. A description of the POP intervention
h. Dosage intensity and type
i. Implementation difficulties
j. The statistical test(s) used
k. Reports of statistical significance (if any)
l. Effect size/power (if any)
m. The conclusions drawn by the authors

Josh Hinkle (one of the authors of this review) and Cody Telep (a Research Assistant at the University of Maryland) will independently code each eligible study. Where there are discrepancies, either Dr. Eck or Weisburd will review the study and determine the final coding decision.

3.6 Statistical procedures and conventions

Meta-analytic procedures will be used to combine data from studies. For eligible studies, with enough data present, effect sizes will be calculated using the standardized measures of effect sizes as suggested in the meta-analytic literature (e.g. see Lipsey and Wilson, 2001). Mean effect sizes will be computed across studies and we will use a correction such as the inverse variance weight for computing the associated standard error. Though we will examine the Q statistic to assess heterogeneity of effect sizes across studies, it is our initial assumption that effect size is a random factor in our analysis. As such, we will implement a random effects model for all analyses involving effect sizes. This is the case because POP strategies are diverse and they are brought to ameliorate different types of problems. The common factor is the process used by the police. In this context we believe that a mixed effects model will be most appropriate in analyzing the effectiveness of POP outcomes.
We also hope to examine contextual or moderating features of POP. Though it is difficult to know at the outset, we think it important to assess the differential effects of POP across different types of problems and across different types of treatments. We are also interested in whether the strength of the effect varies across departments or other contextual variables. To assess this we will use the analog to the ANOVA method of moderator analysis (see Lipsey and Wilson, 2001) for categorical moderator variables and meta-analytic regression analysis for continuous moderator variables or analyses involving multiple moderators. At the same time, we recognize that such analyses will be dependent on the number of studies that are available for inclusion in the meta analysis.

Finally, publication bias is a concern in every meta analysis. As such, we will use traditional methods to test for the sensitivity of the findings to publication bias in the experimental and quasi-experimental studies. These methods will include a comparison of the mean effect size for published and unpublished studies and a trim-and-fill analysis. However, in our review of pre-post studies this will be a more complicated issue. Many pre and post studies are likely to come from sources such as the Goldstein Award nominees and winners. This is clearly a biased sample as departments are not going to submit papers on programs that did not work to such a competition. As such we think it will be difficult to rely upon traditional quantitative methods to deal with publication bias. The pre and post studies will be a separate part of this review, and this severe risk of publication bias will be explicitly discussed in this section of the review.

3.7 Treatment of qualitative research

Qualitative studies will not be included in the current review.

4. Timeframe

The review process will adhere to the following schedule:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Search for published and unpublished studies</td>
<td>September-October 2006</td>
</tr>
<tr>
<td>Relevance assessments</td>
<td>November-December 2006</td>
</tr>
<tr>
<td>Coding of eligible studies</td>
<td>January-March 2007</td>
</tr>
<tr>
<td>Statistical analysis</td>
<td>March-April 2007</td>
</tr>
<tr>
<td>Preparation of report</td>
<td>April-June 2007</td>
</tr>
<tr>
<td>Submission of completed report</td>
<td>June 2007</td>
</tr>
</tbody>
</table>

5. Plans for Updating the Review

The authors expect to update the review every five years.

6. Statement Concerning Conflicts of Interest

Professor Weisburd has been an evaluator of problem-oriented policing programs, including the Jersey City Drug Market Analysis Experiment. He has also published a
review with Professor Eck of police effectiveness in the ANNALS (2004) which was based on Weisburd and Eck’s work at the National Research Council. The narrative review suggests that POP programs do have a positive crime and disorder outcome. The review provides the basis for Professor Weisburd’s interest in carrying out this systematic review. Professor Weisburd would not be uncomfortable if the findings showed that the narrative review was incorrect.

Professor Eck has participated in the early and continuing development of problem-oriented policing. He is an Individual Affiliate of the Center for Problem-Oriented Policing and has written extensively on the positive value of problem-oriented policing, as well as how to carry out problem-oriented crime analysis, solution development, and evaluations. In the Weisburd and Braga (2006) edited book, Police Innovation, he is classified by the editors as an advocate of problem-oriented policing. Professor Eck has reviewed place based interventions for the Maryland group, which includes many problem-oriented interventions, and found them generally effective. With Professor Weisburd he helped draft the police effectiveness chapter for the National Research Council review of police research. In this and their subsequent coauthored article the authors concluded problem-oriented policing was effective. Professor Eck has written extensively on the limitations of systematic reviews, the limitations of randomized designs, and the value of small-n case studies.
7. References


Appendix A: POP META ANALYSIS CODING SHEETS

I. ELIGIBILITY CHECK SHEET

1. Document ID: __ __ __ __

2. First author last name: ________________

3. Study Title: __________________________

4. Journal Name, Volume and Issue: ________________________________

5. Document ID: __ __ __ __

6. Coder’s Initials __ __ __

7. Date eligibility determined: __________

8. A study must meet the following criteria in order to be eligible. Answer each question with a “yes” or a “no”

a. The study is an evaluation of a problem-oriented policing intervention (the SARA model is followed). _____

b. The study includes a comparison group (or a pre-intervention comparison period in the case of pre-post studies) which did not receive the treatment condition (problem-oriented policing). Studies may be experimental, quasi-experimental, or pre-post evaluations. ______

c. The study reports on at least one crime/disorder outcome\(^8\). ______

d. The study is written in English. _____

If the study does not meet the criteria above, answer the following question:

a. The study is a review article that is relevant to this project (e.g. may have references to other studies that are useful, may have pertinent background information) ______

\(^8\)For our purposes, we will include studies that aim to affect both physical and social disorder. Physical disorder consists of neighborhood dilapidation as indicated by various factors including graffiti, broken windows, abandoned lots, abandoned cars, and boarded up houses. Social disorder consist of various behaviors and nuisance crime such as the following: harassment, noise, neighbor disputes, public dispute/argument, riot/civil disorder, intoxicated person, public drinking, loitering, other public nuisance, and disorderly conduct. Any study that examines the effects of problem-oriented policing on these or similar disorder outcomes will be eligible for our review.
9. Eligibility status:
   ____ Eligible
   ____ Not eligible
   ____ Relevant review

Notes:
________________________________________________________________________
________________________________________________________________________
____________
II. CODING PROTOCOL

Reference Information

1. Document ID: __ __ __ __

2. Study author(s): ____________________

3. Study title: _______________________

4a. Publication type: ______
    1. Book
    2. Book chapter
    3. Journal article (peer reviewed)
    4. Thesis or doctoral dissertation
    5. Government report (state/local)
    6. Government report (federal)
    7. Police department report
    8. Technical report
    9. Conference paper
    10. Other (specify)

4b. Specify (Other)______________________

5. Publication date (year): ____________

6a. Journal Name: ____________________

6b. Journal Volume: _______________

6c. Journal Issue: ____________

7. Date range of research (when research was conducted):
    Start: ______________
    Finish: ______________

8. Source of funding for study: ______________

9. Country of publication: ______________

10. Date coded: ______________

11. Coder’s Initials: __ __ __
Describing the Problem

12. How did the problem come to the attention of the police? (Select all that apply)
   1. Crime analysis unit
   2. Citizen meeting/organization
   3. Officer observation/suggestion
   4. Other government agency
   5. Funding agency
   6. Researcher
   7. Other (specify)

12b. Specify (Other) ____________

13. What was the environment where the problem occurred? (Select all that apply)
   1. Residential
   2. Recreational (bars, restaurants, parks)
   3. Offices
   4. Retail
   5. Industrial
   6. Agricultural
   7. Education
   8. Human service (jails, courts, hospitals)
   9. Public ways
   10. Transport (buses, airports)
   11. Open/transitional (construction sites, abandoned buildings)
   12. N/A (no particular environment/city wide/certain neighborhoods/can’t tell)

14a. What type of event makes up the problem? ______
   1. Predatory crimes against persons (sexual assault, robbery, homicide)
   2. Predatory crimes against property (vandalism, auto theft)
   3. Illegal service crimes (prostitution, selling drugs)
   4. Public disorder crimes (disorderly conduct, drunkenness)
   5. Vehicular/traffic offenses
   6. Status crimes
   7. Hard drug use
   8. Overall crime/disorder
   9. Other (specify)

14b. Specify (Other) ____________

15. Specifically, what event(s) makes up the problem?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
16. What is the unit of analysis of the problem? (Use grid below and enter number for corresponding cell)

<table>
<thead>
<tr>
<th></th>
<th>Offenders/ Handlers</th>
<th>Targets/ Victims</th>
<th>Guardians</th>
<th>Places/ Managers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual/micro</td>
<td>1</td>
<td>4</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>Small area/meso</td>
<td>2</td>
<td>5</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>Large area/macro</td>
<td>3</td>
<td>6</td>
<td>9</td>
<td>12</td>
</tr>
</tbody>
</table>

17a. What data sources were used for analysis of the selected problem? (Select all that apply)

1. Official crime data
2. Arrest information
3. Surveys of people (non-offenders)
4. Observations/site visits of places or environments
5. Interviews and discussions with people (non-offenders)
6. Interviews of offenders
7. Literature examination
8. Consultation with government agencies
9. Consultations with businesses
10. Consultations with community organizations
11. Other (specify)

17b. Specify (Other) _____________________

18a. What groups were consulted in creating the response? (Select all that apply)

1. Neighborhood associations/organizations
2. Government organizations/agencies
3. Social service agencies
4. Commercial establishments/businesses
5. National organizations with an interest in the problem (e.g. MADD)
6. Individual residents
7. Other police departments
8. Specialized units in the police department
9. Other (specify)

18b. Specify (other) ________________
Describing the Response

19. At what unit of analysis was the treatment delivered/intervention directed at? (Use grid below and enter number for corresponding cell)

<table>
<thead>
<tr>
<th></th>
<th>Offenders/ Handlers</th>
<th>Targets/ Victims</th>
<th>Guardians</th>
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<td>8</td>
<td>11</td>
</tr>
<tr>
<td>large area/macro</td>
<td>3</td>
<td>6</td>
<td>9</td>
<td>12</td>
</tr>
</tbody>
</table>

20a. What aspects of situational crime prevention were used in the implementation of the response? (Select all that apply)

1. Increasing the effort of crime
2. Increasing the risks of crime
3. Reducing the rewards of crime
4. Reducing provocations
5. Removing excuses for crime
6. N/A- Situtational crime prevention not used
7. Other

20b. Specify (Other)___________________

21a. What groups (other than the police) were involved in the implementation of the response? (Select all that apply)

1. Neighborhood associations/organizations
2. Government organizations/agencies
3. Social service agencies
4. Commercial establishments/businesses
5. National organizations with an interest in the problem (e.g. MADD)
6. Individual residents
7. Other police agencies
8. Other criminal justice agencies
9. Other (specify)

21b. Specify (Other)___________________
22a. At what level of the police department was the response implemented? _____
   1. Entire department/all officers involved
   2. Certain precincts/districts involved
   3. Special unit (i.e. community policing unit) involved
   4. Select few officers in specific area involved
   5. Other (specify)
   6. N/A (not mentioned)

22b. Specify (Other)___________________

23a. What divisions of the police department were involved in implementing the response? (Select all that apply)
   1. Patrol
   2. Investigations
   3. Drugs/narcotics
   4. Crime analysis
   5. Other (specify)

23b. Specify (other) ______________________

**Implementation of Response**

24. What did the evaluation indicate about the implementation of the response? _____
   1. The response was implemented as planned or nearly so
   2. The response was not implemented or implemented in a radically different way
      than originally planned
   3. Unclear/no process evaluation included

25. If the process evaluation indicated there were problems with implementation of the response, describe these problems:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

**Location of the intervention**

26. Country where study was conducted: ________________

27. City (and state/province, if applicable) where study was conducted: _______________
The following questions refer to the area receiving treatment:

28a. Geographic area receiving treatment: ______
   1. Micro place (street segments/blocks)
   2. Neighborhood/police beat
   3. Police district/precinct
   4. Entire city
   5. Other (specify)

28b. Specify (Other)___________________

29. What is the exact geographic area receiving treatment?
________________________________________________________________________
____

The following refer to the area not receiving treatment (applicable if there is a separate control group in the study)

30a. Geographic area NOT receiving treatment: ______
   1. Micro place (street segments/blocks)
   2. Neighborhood/police beat
   3. Police district/precinct
   4. Entire city
   5. Other (specify)
   6. N/A (no control area)

30b. Specify (Other)___________________

31. What is the exact geographic area not receiving treatment?
________________________________________________________________________
____

The following questions are about the target population of the intervention (if the intervention is not targeting groups of problem people skip to question 38):

32a. What is the target population of the treatment? _____
   1. Specific group(s) of offenders
   2. Specific group(s) of victims
   3. Specific group(s) of other community residents
   4. Entire population (no specific groups targeted)
   5. Other (specify)

32b. Specify (other) _____________
33. What is the exact target population? _______________________

34. Total population of target population (if known): ________

35. Gender composition of target population:
   1. Mostly male
   2. Mostly female
   3. Unknown/not mentioned

36. Age composition of target population
   1. Mostly juvenile
   2. Mostly adult
   3. Unknown/not mentioned

37. Socio-economic status of target population:
   1. Mostly below poverty line
   2. Mostly above poverty line
   3. Unknown/not mentioned

**Methodology/Research design:**

38a. Type of study: _____
    1. Randomized experiment
    2. Nonequivalent control group (quasi-experimental)
    3. Multiple time series (quasi-experimental)
    4. Pre-post test (no control group)
    5. Interrupted time series
    6. Other (specify)

38b. Specify (Other)___________________

**Outcomes reported** *(Note that for each outcome, a separate coding sheet is required)*

39. How many crime/disorder outcomes are reported in the study? _____

40. What is the specific outcome recorded on this coding sheet?

_______________________________________________________________
41. Was it the primary outcome of the study? ______
   1. Yes
   2. No
   3. Can’t tell/researcher did not prioritize outcomes

42a. Was this initially intended as an outcome of the study? ______
   1. Yes
   2. No (explain)
   3. Can’t tell

42b. If no, explain why:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Unit of analysis

43. What was the unit of analysis for the research evaluation? (Use grid below and enter number for corresponding cell)

<table>
<thead>
<tr>
<th></th>
<th>Offenders/ Handlers</th>
<th>Targets/ Victims</th>
<th>Guardians</th>
<th>Places/ Managers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual/micro</td>
<td>1</td>
<td>4</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>Small area/meso</td>
<td>2</td>
<td>5</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>Large area/macro</td>
<td>3</td>
<td>6</td>
<td>9</td>
<td>12</td>
</tr>
</tbody>
</table>

44. How many units of analysis are there for the intervention in the study? ______

45. Did the researchers collect nested data within the unit of analysis?
   1. Yes
   2. No

Dependent Variable

46a. What type of data was used to measure the outcome covered on this coding sheet?
   1. Official data (from the police)
   2. Researcher observations
   3. Self-report surveys
   4. Other (specify)

46b. Specify (Other)___________________
47a. If official data was used, what specific type(s) of data were used? (Select all that apply)
   1. Calls for service (911 calls)/crime reports
   2. Arrests
   3. Incident reports
   4. Level of citizen complaints
   5. Other (specify)
   6. N/A (official data not used)
47b. Specify (Other)___________________

48a. If researcher observations were used, what types of observations were taken? (Select all that apply)
   1. Physical observations (e.g. observed urban blight, such as trash, graffiti)
   2. Social observations (e.g. observed disorder, such as loitering, public drinking)
   3. Other observations (specify)
   4. N/A (researcher observations not used)
48b. Specify (Other)___________________

49a. If self-report surveys were used, who was surveyed? (Select all that apply)
   1. Residents/community members
   2. Business owners
   3. Elected officials
   4. Government/social service agencies
   5. Other (specify)
   6. N/A (self-report surveys not used)
49b. Specify (Other)___________________

50. Did the researcher assess the quality of the data collected?
   1. Yes
   2. No

51a. Did the researcher(s) express any concerns over the quality of the data?
   1. Yes
   2. No

51b. If yes, explain

________________________________________________________________________
________________________________________________________________________

__________________________________________
52a. Does the evaluation data correspond to the initially stated problem? (i.e. if the problem is fear of crime, does the evaluation data look at whether fear of crime decreased)
   1. Yes
   2. No

52b. If no, explain the discrepancy:
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

**Effect size/Reports of statistical significance**

**Dependent Measure Descriptors**

**Sample size**

54. Based on the unit of analysis for this outcome, what is the total sample size in the analysis? _______

55. What is the total sample size of the treatment group (group that receives the response)? _______

56. What is the total sample size of the control group (if applicable)? _____

57a. Was attrition a problem in the analysis for this outcome?
   1. Yes
   2. No

57b. If attrition was a problem, provide details (e.g. how many cases lost and why they were lost).
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

58a. What do the sample sizes above refer to?
   1. Crimes
   2. People
   3. Geographic areas
   4. Places
   5. Other (specify)
58b. Specify (other) ______________

**Effect Size Data**

59. Raw difference favors (i.e. shows more success for):
   1. Treatment group (or post period)
   2. Control group (or pre period)
   3. Neither (exactly equal)
   9. Cannot tell (or statistically insignificant report only)/ Not Applicable (Pre-Post study)

60. Did a test of statistical significance indicate statistically significant differences between either the control and treatment groups or the pre and post tested treatment group? ____
   1. Yes
   2. No
   3. Can’t tell
   4. N/A (no testing completed)

61. Was a standardized effect size reported? 
   1. Yes
   2. No

62. If yes, what was the effect size? ______

63. If yes, page number where effect size data is found ______

64. If no, is there data available to calculate an effect size? 
   1. Yes
   2. No

65a. Type of data effect size can be calculated from:
   1. Means and standard deviations
   2. t-value or F-value
   3. Chi-square (df=1)
   4. Frequencies or proportions (dichotomous)
   5. Frequencies or proportions (polychotomous)
   6. Pre and Post (and/or during counts)
   7. Other (specify)

65b. Specify (other) __________

**One Site Pre-post Study Counts**

66a. Target Area Pre-period Number of events for current outcome ______
66b. Target Area During-period Number of events for current outcome ______
66c. Target Area Post-Period Number of events for current outcome ______

66d. Comparison Area Pre-period Number of events for current outcome ______
66e. Comparison Area During-period Number of events for current outcome ______
66f. Comparison Area Post-Period Number of events for current outcome ______

66g. Did the evaluation control for validity by using multivariate methods (i.e. regression) to assess the impact of the program on the outcome? ______

66h. If yes, did this analysis find that the intervention reduced the outcome at a statistically significant level (p=.05)? ________________

Means and Standard Deviations

67a. Treatment group mean. _____
67b. Control group mean. _____

68a. Treatment group standard deviation. _____
68b. Control group standard deviation. _____

Proportions or frequencies

69a. n of treatment group with a successful outcome. _____
69b. n of control group with a successful outcome. _____

70a. Proportion of treatment group with a successful outcome. _____
70b. Proportion of treatment group with a successful outcome. _____

Significance Tests

71a. t-value _____
71b. F-value _____
71c. Chi-square value (df=1) _____

Calculated Effect Size

72. Effect size _____
**Conclusions made by the author(s)**

*Note that the following questions refer to conclusions about the effectiveness of the intervention in regards to the current outcome/problem being addressed on this coding sheet.*

73. Conclusion about the impact of the intervention? _____
   1. The authors conclude problem declined
   2. The authors conclude the problem did not decline
   3. Unclear/no conclusion stated by authors

74. Did the assessment find evidence of a geographic displacement of crime? ______
    1. Yes
    2. No
    3. Not tested

75. Did the assessment find evidence of a temporal displacement of crime? _____
    1. Yes
    2. No
    3. Not tested

76. Did the author(s) conclude that the POP intervention beneficial? ______
    1. Yes
    2. No
    3. Can’t tell

77. Did the author(s) conclude there a relationship between the POP intervention and a reduction in crime/disorder? _____
    1. Yes
    2. No
    3. Can’t tell

78. Additional notes about conclusions:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________