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I, Kathleen M. Gallagher , hereby submit this original work as part of the requirements for the degree of Doctor of Philosophy in Criminal Justice.

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Problem Framing in Problem-Oriented Policing:
An Examination of Framing from Problem Definition to Problem Response

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Problem Framing in Problem-Oriented Policing:

An Examination of Framing

from Problem Definition to Problem Response

A Dissertation

Submitted to the Graduate School of the University of Cincinnati in partial fulfillment of the requirements for the degree of Doctor of Philosophy in the School of Criminal Justice in the College of Education, Criminal Justice, and Human Services.

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Abstract

Problem frames help us to understand problems. Frames, also known as frameworks of thought, are tools that aid in our interpretation of facts and experiences (Goffman, 1974). Problem-oriented policing (POP) is a policing strategy that encourages the police to apply alternative frameworks to their problem-solving activities. The present research focuses on how problem-oriented policing practitioners frame problems. The reason for this focus is two-fold. First, problem-oriented policing aims to change the mindsets of police so that they approach problems in a specific manner that encourages the consideration of both traditional and non-traditional responses. Second, the framing process is an essential component to a successful problem-oriented policing project (Goldstein, 1979; 1990).

The primary goal of this dissertation is to explore the question: What frames do police use in problem-oriented policing? This question is examined through a content analysis of POP projects and a survey of POP officers. The findings for the primary research question are then supplemented with a number of related questions and answers about how problem frames help to define and respond to problems in problem-oriented policing.

While the present research finds evidence that alternative problem frames are being introduced into problem-oriented policing research and used by problem-oriented policing officers, it also identifies weaknesses in problem framing. In particular, POP officers appear to rely heavily on traditional responses when the initial definition and analysis of a problem are weak. This then inhibits a search for, and the use of, non-traditional responses. Based on the research findings, there are opportunities available to improve the training of officers engaged in problem-oriented policing. Further, there are many opportunities for future research on the links between problem framing and problem-oriented policing.

Acknowledgments

At the end of the day, I alone am responsible for the content of this dissertation. The errors and omissions are owned solely by me. However, the motivation to complete this dissertation, and my studies, has come from a number of sources. These sources must be thanked.

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Dr Frank and Dr Eck should also be thanked for paving the way to my research partnerships with Troy Payne and Julie Wartell. I thank Julie and Troy for unknowingly

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This dissertation is dedicated in memory of Lorelyn Watson Newkirk. Lorelyn was a great friend who, among other things, helped me to recognize that having an interest in the law didn't mean that I had to become a lawyer. Amos Perlmutter was right, "Ms Watson understands everything." I wish that she could be here to celebrate this milestone.

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Chapter 1 – A Picture of Frames

Problem frames help us to understand problems. Frames, also known as frameworks of thought, are tools that aid in our interpretation of facts and experiences (Goffman, 1974). Different frameworks may prompt different response choices, even when the facts are the same (Fagley & Miller, 1990; Tversky & Kahneman, 1986). For some problems, there are multiple frameworks that explain the problem and its contributing elements (Allison, 1969; Kahneman, 2011). Both the characteristics of a problem and the individual experiences of the problem-solver can influence which frame (or frames) is selected (Tversky & Kahneman, 1986). In sum, problem frames are general thought structures that allow us to organize facts and experiences to guide decision-making.

Within criminal justice and popular culture, examples of contrasting problem frames are widely available. Here are three examples:

- In the death of Trayvon Martin some media outlets highlighted issues of racial conflict between a white perpetrator and black victim, while others in the media presented a vigilante hero – a neighborhood watch captain who believed he saw Martin engaged in suspicious activity, attempted to detain him, and ultimately shot Martin in self-defense.

- In a recent Supreme Court case, the definition of marriage under the Defense of Marriage Act was presented by conservative parties as a relationship between heterosexual couples that promotes procreation, while liberal parties identified marriage as a union between consenting partners, regardless of gender or procreative capabilities.

- In state legislatures throughout the country there is an ongoing focus on reducing crime and disorder. Legislators, however, have contrasting opinions about whether incapacitation or rehabilitation is the best approach to responding to their crime concerns.

Each of these examples reminds us that there are always two sides, and sometimes more, to every story. The frames that are used to explain the contrasting stories may also be considered as

contrasting perspectives, opposing theories, or divergent opinions. Although the facts at the root of the issue do not change, the contrasting frames can elicit differing responses from individuals responding to the frame (Kahneman, 2011).

Problem framing has been examined extensively in the social sciences. From economics to sociology to psychology, researchers have examined the fact that how a problem is framed influences how others respond to that problem. This research examines framing as both a noun that identifies an object, a problem frame, and a verb that explains action or influence, the framing effect (Kahneman & Tversky, 2000). A problem frame is both applied to a problem and responded to, after it has been applied.

The use of problem frames may vary depending on the issue to be framed and the framer. Academics will use frames that are based in theory to explain problems of interest. Academics from different fields may use different theories to explain a problem. For example, there are a variety of ways to interpret the variable unemployment in a model to predict crime. An economist may interpret this variable as a measure of the relative costs and benefits of legitimate and illegitimate work. When unemployment increases, illegitimate forms of employment become more cost effective than legitimate forms of work. A sociologist, however, may see the variable of unemployment as a measure of the level of strain placed on individuals attempting to enter the legitimate workforce. Higher rates of unemployment will lead to higher values of strain associated with legitimate work. These factors will then increase the attractiveness of illegitimate work, if it is seen as less stressful.

Practitioners will also use frames to interpret their work. The frames of practitioners are grounded in a mix of theory and experience. When discussing juvenile delinquency, a social worker, a teacher, and a police officer may all approach the same data set with different problem

frames. While the three practitioners may agree on the dependent variable, juvenile delinquency, the independent variables in this problem may be different for each person. As a result, each practitioner's initial recommendation for resolving the issue may be different.

Problem frames may also be rooted in culture. A recent immigrant who has escaped a totalitarian regime may be hesitant to contact the police after experiencing domestic violence. Similarly, a wealthy suburbanite might be hesitant to contact the police after a domestic dispute. While the responses to the two domestic incidents may be similar, the cultural root of the response is likely very different.

Although there has been wide discussion of the influence of problem framing in other social sciences, attention to this issue has been limited within criminal justice and policing. This may be because previous generations of police practice primarily focused on one frame: the traditional policing frame. This frame is a reactive, incident-based, offender-focused frame (Eck & Spelman et al., 1987; Goldstein, 1990). Today, however, there are a variety of alternative problem frames that police officers might apply, including situational crime prevention, routine activities, broken windows, problem-oriented policing, or crime prevention through environmental design. Because of the variety of problem frames that can be used to explain problems and influence responses, the issue of problem framing in policing needs attention.

Problem-oriented Policing and Problem Frames

Problem-oriented policing (POP) is a relatively new policing strategy that encourages the police to apply alternative frameworks to their problem-solving activities. Problem-oriented policing encourages a proactive response to groups of crime and disorder problems that are of concern to the community by focusing on groups of crimes rather than individual offenders (Goldstein, 1979). Although the concept of problem-oriented policing has received a great deal

of attention, researchers have found that the application of the process has had limited success (Braga & Weisburd, 2006; Scott, 2000). One of the reasons for this deficiency may be that officers default to the traditional framework when they respond to a problem (Goldstein, 1979; Bichler & Gaines, 2005; Skogan et al., 1999). Problem-oriented policing encourages officers to consider responses that also involve alternative frameworks, a change that may make some uncomfortable.

The focus within POP on identifying alternative frames to explain crime problems highlights the need for a better understanding of framing in policing. The frames that police apply to crime problems may influence their response and whether that work is able to reduce crime. In order for problem-oriented policing to be successful, the police need to understand and use the alternative frames that are available.

Research on framing in the policing literature is limited (Payne, Gallagher, Eck, & Frank, 2013). However, there have been a few recent efforts to examine the influence of problem frames. The importance of alternative frames for both patrol officers (Graziano, Rosenbaum, & Schuck, 2013) and investigators (Rossmo, 2009) has been discussed. Research has also examined if patrol officers use the same frames to identify high crime areas (Bichler & Gaines, 2005). Another recent piece also provides a case study of how different problem frames can lead to different solutions (Payne et al., 2013). These pieces have largely found that police officers struggle to apply alternative frames (Bichler & Gaines, 2005; Scott, 2000). To date there is no research that examines the process of selecting and using problem frames within problem-oriented policing. As the success of the POP process may be dependent upon officers examining alternative frames, this topic deserves consideration.

The Research Focus

Investigating how the police frame problems and the frameworks that are used by the police are unquestionably important tasks. To learn more, we can examine how the police frame problems under different styles of policing, such as community policing or intelligence-led policing. The present research focuses specifically on how problem-oriented policing practitioners frame problems. The reason for this focus is two-fold. First, problem-oriented policing aims to change the mindsets of police so that they approach problems in a specific manner that encourages the consideration of both traditional and non-traditional responses. An officer who embraces the problem-oriented process and has been trained in POP should be more likely to consider problems through alternative lenses (Scott, 2000). Second, the framing process is an essential component to a successful problem-oriented policing project (Goldstein, 1979; 1990). While a number of different frameworks may be useful to examine a problem, some frameworks may prove to be more effective at reducing crime over a short period of time than others. This is not to say that one problem frame is better than another, but that one frame leads to more immediate reductions in crime and disorder – a goal of problem-oriented policing. For example, a social disorganization frame may explain why crime is occurring in a certain neighborhood, but a hotspots of crime framework may be more useful to actively reduce crime.

A number of police departments have invested in training their officers in problem-oriented policing and have worked to institutionalize the process in their departments (Knutsson, 2003). Theoretically, the officers in these departments are aware of and regularly use alternative framing processes in their work. However, these efforts have had varying levels of success (Scott, 2000). Research on problem-oriented policing efforts suggests that without the combination of extensive training, management buy-in, and officer interest, police officers will

default to their traditional framework when faced with new crime problems (Graziano et al., 2013; Scott, 2000; Skogan et al., 1999). Even in departments where POP is said to be institutionalized, there is little evidence that a majority of officers incorporate alternative framing into their work (Cordner & Biebel, 2005; Hassell & Lovell, 2014). Additionally, police departments throughout the country are conducting efforts labeled as problem-oriented policing projects, but many of these projects may be mislabeled (Clarke, 1997). Previous reviews of POP projects suggest that many efforts apply the traditional policing frame, rather than alternative frames (Bynum, 2001; Scott & Clarke, 2000; Scott, 2000).

Researching Frames

In the present research I start with the assumption that the framework that is used to explain and understand a problem will influence the response that is selected. A large body of research on frames outside of policing supports this assumption (Allison, 1969; 1971; Fagley & Miller, 1990; Kahneman, 2011; Robertson, 2001; Scheufele, 1999; Tversky & Kahneman, 1981; 1986). If this is true, then problem framing is a key element in successful problem-solving. And, in policing specifically, problem framing will be a key element in successful problem-oriented policing projects. However, errors in the development of a frame (e.g. cognitive biases or satisficing) could lead to the development of responses that are not well tailored to reduce or eliminate the particular problem.

To examine these assumptions about how the police approach problem framing activities, my primary research question is:

- What frames do police use in problem-oriented policing?

The findings for this question are then supplemented with a number of ancillary research questions about how problem frames help to define and respond to problems in problem-oriented policing, including, but not limited to:

- Are the frames used more likely to be traditional or alternative frames?
- Are there clusters of frames that appear together more often than others?
- Are certain frames used in response to certain types of crimes?
- Has the usage of frames changed over time? and
- How does the presentation of a problem influence the frames that are selected?

To answer both the primary and secondary questions, I used a mixed methods research approach to explore a collection of problem-oriented policing projects and a survey of problem-oriented policing officers. First, I conducted a content analysis of problem-oriented policing projects. These projects were previously submitted for consideration for one of the two awards for excellence in problem-solving in policing. I used these submissions to gauge both the type of frames that are used and the content of the frames of POP projects. If nominees for national and international recognition are not using alternative problem frames, then it is unlikely that average or mediocre projects will be doing so. I then used a small survey of officers involved in problem-oriented policing to attempt to confirm (or refute) and supplement the content analysis findings. These surveys examined whether officers who have an awareness of problem-oriented policing use alternative problem frames. I then also explored how the framing of the problem influenced how officers responded to the problems. The answers to these questions, when combined with earlier studies, may help us improve how we train officers to frame problems and could improve the quality of problem-oriented policing efforts.

Overview of Chapters

This research aims to improve our understanding of how the police frame problems, in order to better train officers to respond to problems. Chapters 2 through 5 contain an overview

of the two primary issues under review: framing and problem-oriented policing. Chapter 2 reviews the greater literature on problem framing in the social sciences to identify links that can be made to policing. Extensive research has been undertaken to explain how different frames can influence action in different ways. Both frame language and the presence of certain alternative frames have an impact on decision-making. Police problem-solvers can use the research conducted in other social science fields to learn how to develop problem frames that can improve problem responses. Chapter 3 introduces police problems and problem-oriented policing. Chapter 4 then discusses research that has previously been conducted on problem-oriented policing efforts and the characteristics of officers involved in problem-solving work. I will conclude the literature review in Chapter 5 with an overview of the research on problem framing in policing.

Chapter 6 identifies the research questions that are examined in this dissertation and the research activities that I conducted to answer the questions. The chapter also introduces the process for operationalizing framing, the data used, and the analysis procedures. Chapters 7 and 8 present the results of my research. Chapter 7 introduces the results from the content analysis. Chapter 8 provides the findings from the survey of officers. The overarching findings from these two chapters are then discussed in Chapter 9. In this chapter, I also integrate the results with our greater knowledge of problem framing in the social sciences. Recommendations for improving the problem framing process in problem-oriented policing and policing in general are provided. I also provide recommendations for future research related to some of the research findings. Improvements in problem framing should lead to improvements in the development of problem responses and, ultimately, a reduction in community problems. Although this dissertation

focuses primarily on the use of framing in problem-oriented policing, this discussion of frames has applications throughout policing, criminal justice, and criminology.

Chapter 2 – Framing Frames

Problem frames help us to decide among choices. In their most advanced form, problem frames provide us with a theme or theory to guide the examination of a problem and its related response. Where we have uncertainty about how a problem is occurring or what elements are contributing to it, how we frame a problem can greatly influence the responses that we select.

Problem frames are ubiquitous. In the news we hear about politicians putting a spin on the facts to serve their conservative or liberal leanings. Within the media and communications there are biases that influence how a new story is communicated, whether it be about a participant in the Olympics or a defendant in a trial. In insurance, the discussion of risk and losses can sway a client's decision to purchase life insurance coverage. Even within medicine, how a doctor presents the likelihood of survival or mortality from a procedure can persuade a patient to undergo a surgery or not participate in a clinical trial.

In this section I will introduce problem framing research from a variety of fields, including economics, psychology, and communications. This chapter will begin with a discussion of the meaning of frames. Although the framing process has been widely discussed, the nuances of problem framing vary among disciplines. This discussion will include a review of the concept of heuristics and the differences between personal and shared frames. Then I will turn to the use of frames to manage meaning or to influence our understanding of reality. Problem frames are 1) selected or created to then 2) influence response. Both elements are important in this discussion, particularly in the light of the fact that frames can alter an individual's choices in ways that are inconsistent or appear to be irrational. Inconsistencies in response may be the result of different types of cognitive traps that can influence the selection of one frame over another. By the conclusion of this chapter, I will have presented a broad

discussion of problem frames that will help us to understand the use of framing within problem-oriented policing.

What are Problem Frames?

In this research, I define problem frames as general thought structures that allow us to organize shared theories and personal experiences to guide decision-making. Throughout this chapter I will expand upon each of these elements to demonstrate how I developed this definition, particularly focusing on problem frames as:

- general thought structures
- that allow us to organize
- shared theories and personal experiences
- to guide decision-making.

General Thought Structures

Within the social sciences the discussion of problem framing is varied. Such discussions may focus on problem frames, primary frameworks, the framing process, or framing effects. The first two terms that I noted describe objects, while the last two terms are actions. The problem framing process includes the creation or application of a frame to a problem as well as the accompanying response to the frame by others (Kahneman & Tversky, 2000). Research on problem framing has examined frames as both dependent and independent variables (Scheufele, 1999). Table 1 identifies a typology of framing research that highlights the differences between personal and shared frames and frames as a cause (independent variable) or an effect (dependent variable). This typology was originally created by Scheufele (1999) to explain research on problem framing in the media. I have modified the version in Table 1 to provide a more general explanation for the differences between framing as a dependent or independent variable and shared or personal frames. When framing is the dependent variable, the focus is on the factors

that may influence the creation or selection of a frame. Typically, we select shared frames and create personal frames when framing is the dependent variable. When we focus on framing as an independent variable, we focus on the framing effect, or how people respond to frames. Framing effects can influence people as a group based on shared beliefs or at the individual level, based on more personal experiences.

Table 1: Problem Framing Typology

	Frames as Dependent Variables	Frames as Independent Variables
Shared Frames	• What factors influence the way issues are framed? • How do these processes work and, as a result, what are the frames that are commonly used?	• What kinds of frames influence the audience's perception of certain issues, and how does this process work?
Personal Frames	• Which factors influence the establishment of individual frames of reference, or are individual frames simply replications of shared frames? • How can the audience member play an active role in constructing meaning or resisting frames?	• How do individual frames influence individual perception of issues?

Based on "Typology of Framing Research" from Scheufele, 1999: 109-109.

While the terms frame and framing effects are used widely, their contexts may vary slightly among different fields. Additionally, while "frame" or "framing" may be the most common terms, these processes may also be labeled as mental accounting (Thaler, 1985), choice architecture (Sunstein, 2013), decision frameworks (Goffman, 1974), or conceptual lenses (Allison, 1969). All of these terms describe the same general concept and process.

Table 2 identifies three different fields of study where the influences of problem framing are examined: behavioral studies, cultural studies, and communication studies. Behavioral studies largely focus on how people respond to different types of frames (Konig, 2013). These types of frames are evident in research about decision-making and choice selection in economics, business, and psychology literature. For example, in business or economics researchers may examine the cost-benefit analyses that individuals conduct in response to various presentations of

data. Cultural studies may focus on both how individuals or groups respond to specific aspects of frames as well as how they develop their own frames (Goffman, 1974). Personal or small-group focused framing processes are discussed in sociology and anthropology studies. In contrast, studies of framing in communications primarily assess the differences in spin or agenda-setting put forth by the communication piece (Iyengar, 1991; 1996; Entman, 1993). Communication frames are applied in journalism, politics, and marketing. This research would focus on how to develop a framework that presents a subject (e.g. product, person, or place) in a particular light. This is in contrast to research on how individuals respond to that manipulation, which is more likely to be the focus of cultural or behavioral studies. Table 2 provides just a small sample of the different types of frames that have been studied and how they are used.

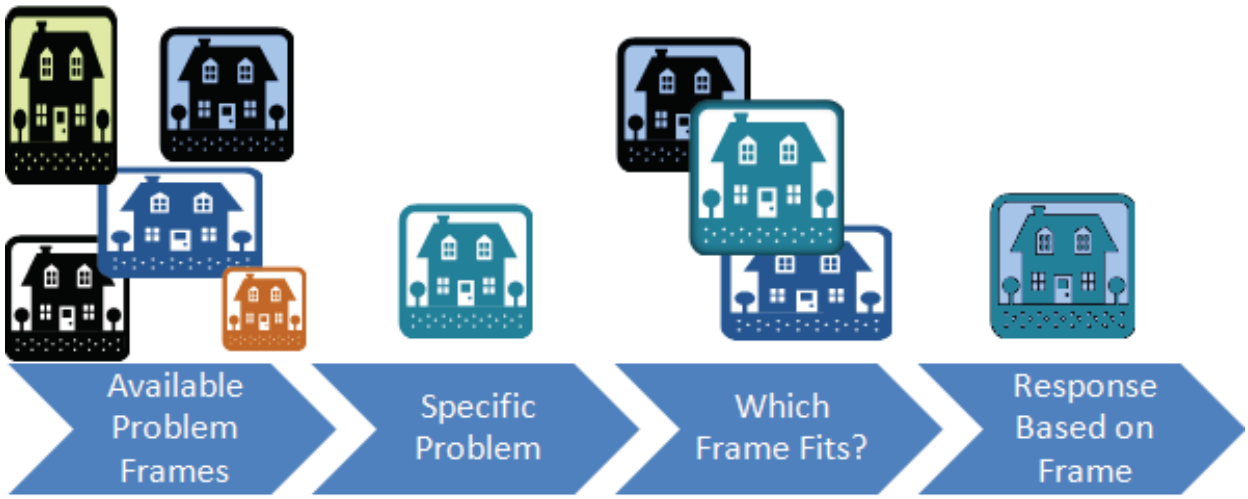
Table 2: Frames in Context

Studying framing in:	Behavioral Studies	Cultural Studies	Communication Studies
Fields of study:	Economics, Business, IT, Psychology	Sociology, Anthropology	Communications, Journalism, Advertising, Marketing, Politics
Framing Focus:	how individuals respond to different frames of meaning (Tversky & Kahneman, 1981)	how individuals or groups interpret certain presentation styles, graphics, or terminology and how they interpret the world based on personal frames (Druckman, 2001)	how a specific theme is advanced to gain attention, i.e. agenda setting (Entman, 1993)
Definition	"the decision-maker's conception of the acts, outcomes, and contingencies associated with a particular choice." (Tversky & Kahneman, 1981)	A group or individual's "schemata of interpretation" allows them to "locate, perceive, identify, and label" (Goffman, 1974: 21)	"to select some aspects of a perceived reality and make them more salient in a communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation." (Entman, 1993: 52)

That Allow Us to <u>Organize</u>

Problem frames can be compared to blueprints for a building or a machine. When a home is built, there are a variety of blueprints that the builder could follow. The builder will meet with the individuals who want to build the home to learn what elements they want in the home. Then the builder will sift through his blueprints and identify one or a few that appear to best meet the homebuyers needs. The homebuyer will then select the design that they like best and the team will move forward. Occasionally, the design is perfect as is, but often the design may need a few minor adjustments to better fit their needs. Additionally, once the home is under construction, the builder or the home buyer may make a few more slight modifications to the blueprint to better suit their needs. Problem frames are adopted in the same manner. Figure 1 below identifies the frame building process.

Figure 1: Frame Building



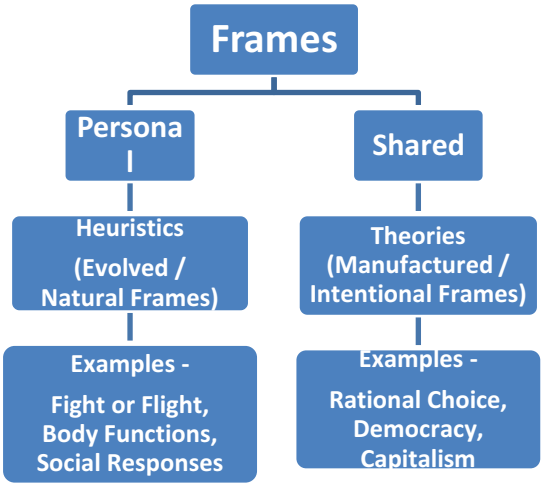
Shared Theories and Personal Experiences

My definition of problem frames also highlights the diverse origins of frames. Whether we choose a personal or shared frame to guide our actions will often depend on the type of problem that is presented. Typically, personal experiences will guide our simple and individual

decisions. Shared theories will guide more important problem-solving efforts that require complex levels of thought. Kahneman (2011) calls these processes thinking fast or thinking slow, respectively, but they are also known as Systems 1 and 2 (Stanovich & West, 2000). Thinking fast uses a specific type of personal frame called a heuristic. Heuristics are thinking short cuts which use previous experiences and knowledge to respond to new problems under the stress of limited information and time constraints (Eagly & Chaiken, 1993). Heuristics are the basis of our routine decision-making, typically following past practices. Heuristics are at the root of responses based on gut instinct or intuition (Todd, 2001). They are the simplest and most individualistic form of problem frames, built from personal experiences. When thinking fast, our minds quickly sift through previous responses and find one that is good enough or close enough to the current situation (Kahneman, 2011; Simon, 1957). In contrast, thinking slow is a process that requires the manual processing of information, often through a series of steps, to reach a decision. These decisions may require us to refer to theories that explain how elements in our environment work. Shared frames, which can also be called theories, are collectively agreed upon to explain a problem and guide responses. Such theories are typically learned and then absorbed through practice.

Figure 2 helps us to distinguish between personal and shared frames. On the left side, personal frames, including, but not limited to heuristics, can be observed through our fight or flight responses, bodily functions, and social responses. On the right side, shared frames include the manufactured or intentional frames, or theories, that we learn through socialization or other mechanisms. These theories can be illustrated by examples such as rational choice, democracy, or capitalism. However, these are just three of a very large number of potential theories that we may learn that guide our choices and actions.

Figure 2: Types of Frames



Kahneman (2011) notes that System 2, or the slow thinking process, is lazy and encourages System 1 to make as many decisions as possible. The slow thinking process will typically only be activated when the fast thinking process can find no answer. There are, however, ways to train the mind to override fast thinking and require a slow thinking decision, particularly when making decisions that are difficult or unfamiliar (Kahneman, 2011; Sunstein, 2013). Such efforts require constant reminders about the need for slow thinking and checks to ensure that steps are being processed and fast decisions are not hijacking the final responses. In contrast, there are some activities that may initially require slow thinking that can eventually become fast thinking exercises. For example, a beginning graduate student may only be mildly familiar with the theories of her field and often refer to her notes to discuss the theories. By the time that student becomes a professor, however, she has become intimately familiar with the theories and is able to discuss them without preparation and can quickly identify their connection to field work. As complex theories and processes become ingrained, they may become a part of fast thinking. This is particularly true in fields where there is predictability in results and opportunities for feedback, such as the natural sciences. Where our decision-making subjects are

unpredictable, such as in some of the social sciences, it may be less appropriate to develop heuristics (Kahneman & Klein, 2009).

One infamous example of where slow thinking can develop into fast thinking expertise is found with the Japanese chicken sexers (Eagleman, 2011). A small group of Japanese chicken examiners are particularly well known for their skills in identifying whether a chick is male or female. As female chicks are much more useful then male chicks, the chicks are examined for gender within days of hatching. However, the gender of a chick is not outwardly obvious. At a Japanese training school, individuals learn to become expert chicken sexers through practice overseen by experts. The trainees pick up a chick and note whether they believe it is male or female. The sexing expert then tells them if they are right or wrong. The expert chicken sexers suggest that novices should not think about all of the details that go into their considerations; they should pick up a chick, look at it, and know that it is a male or female (Eagleman, 2011). For successful chicken sexers, what began as a slow thinking process gradually becomes a fast thinking heuristic.

To Guide Decision-Making

In our daily lives we are constantly applying and responding to problem frames. Many of these actions occur subconsciously. Heuristics influence basic responses, such as the primal decision to fight or take flight. At such a point, time and information is limited and fully rational decision-making may not be possible. When both time and information are more readily available, although not necessarily perfect, we can conduct more thorough decision-making. However, this decision-making is still limited to the time and knowledge available and may not be seen as the best choice in the future. As our preferences for handling criminals has shown us

(from corporal punishment to public shaming to rehabilitation), what might appear to be the best framework for a problem today may not make for the best decisions tomorrow.

While it is not possible to identify whether a "best" framework can be selected, it is possible to assess the utility of problem frames by examining whether actions based on the framework are useful. For example, if city planners interested in reducing traffic accidents apply the 80/20 rule (also known as the Pareto Principle) to their work, they would focus their attention on a small number of locations in the city with the highest number of accidents. If it was useful to apply this rule to this situation, then the city planners would find that changes in a few highly problematic locations would result in a dramatic reduction in accidents. The plan could prove to have limited or no usefulness if there actually weren't a few locations with high numbers, but if the majority of locations had a similar, small number of accidents. This example highlights the application of a shared theoretical framework to a specific problem in order to develop a response. If the framework results in a reduction of accidents, then it is useful for meeting the goal of the project.

Managing Meaning: Framing Social Reality

As I highlighted in the introduction, frames may be used to develop contrasting explanations of how an event occurred. While the facts remain the same, different explanations for the facts may develop around contrasting perspectives, opposing theories, or divergent opinions. This process of problem framing is also known as the management of meanings (Fairhurst, 2005). When we mention the idea of "managing meanings," some may think about politics, media, or marketing. When framing is used to influence audience response, the process may be identified as agenda-setting, propaganda, spin, or manipulation, because it is typically trying to sell a perspective, product, or candidate (Scheufele, 1999). These are some of the areas

where problem framing is most blatant and where people may most easily recognize the influence of framing efforts. However, the influence of problem framing can be found almost any time you are presented with information. Who collected the information , why, and how they disseminate that information is influenced by a variety of elements, including personal demographics, funding, political ideology, education, and so on (Scheufele, 1999). All of these elements may influence how a message is framed.

Problem framing provides us with context for our decision-making; it influences how we perceive and act upon reality. This context is derived from our pool of shared theories and personal experiences. When a problem frame is created, it gives cues as to how the creators want us to view the problem. When a problem frame evolves, it provides insights into the experiences and biases that will influence a decision-maker. When a problem frame is adopted, it gives cues as to how the adoptee will proceed with their work. In this section I will discuss research that examines how problem frames can influence our understanding of reality. This discussion largely focuses on problem framing as an independent variable, but also highlights influential frame creation elements.

The earliest discussions of the problem framing concept highlighted the fact that the same information could be presented in a variety of different ways and then lead to different results. Graham Allison (1969; 1971) provides a classic example of the wide variety of frames that can be developed around a problem in his discussions of the Cuban Missile Crisis. Allison presents three different frames of reference, what he calls ‘conceptual lenses’, to explain the choices President Kennedy was faced with in dealing with the crisis. The frames highlight the differences in choices when approaching the problem from the view of the rational actor, an organizational process, or governmental politics (Allison, 1971). While Allison’s review of the

different frames at work in this pivotal decision was conducted after the crisis was resolved, military and government leaders regularly conduct these types of analyses with as-yet unmet problems in war games. Such activities are today conducted regularly to determine how different problem frames might influence the outcome of various forms of attacks (Bracken & Shubik, 2001)

Other researchers have highlighted different types of generic frames that might be used to lead an audience to interpret an action or problem one way over another. Goffman (1974) highlights the difference between physical frames, which describe a specific action that occurs, and social frames, which interpret the action and give it meaning. For example, in a physical frame, a smile is just a smile, but in a social frame, a smile could also be an invitation. Within communications research, there is discussion of thematic frames and episodic frames. Thematic frames are typically more fact focused to provide background, while episodic frames highlight the drama of a single incident or an individual story, such as survival or loss of innocence (Druckman, 2001; Iyengar, 1991; Stalans, 2012). Under a thematic frame we are provided statistics about the occurrence of crime and victimization. The episodic frame, in contrast, will highlight the story of one individual who has been the victim of a particularly heinous crime. Finally, there is a distinction between broad and narrow frames. Broad frames may combine several issues or decisions together for an aggregate choice, while narrow frames will lead the decision-maker to review each decision individually (Hardin & Looney, 2012; Redelmeier & Tversky, 1992).

Ir-rational Actors

Early research on decision-making in economics was based on the rational actor framework. A rational actor will consider all information about a decision and then select the

option that provides the most benefits for the least costs. The rational actor, economists assumed, had all of the relevant information, a full understanding of all of the choices and unlimited time and information processing power. In the middle of the 20th century, however, researchers began to examine the fact that actors often make choices in conflict with the concept of rational choice. In the 1950s, bounded rationality was introduced to explain the wide variety of constraints that could limit fully informed decision-making (Simon, 1957; 1972). Bounded decision-making could be the result of uncertainty or risk, incomplete information about alternatives, performance errors, such as errors in calculation, computational limitations due to the complexity of the task, and individual differences in previous experiences and choices (Simon, 1972; Stanovich, 1999). This process is also known as satisficing, a combination of the words satisfy and suffice, to explain how an individual ends their thinking process when they get to a relatively satisfactory answer (Simon, 1956). Satisficing takes a great deal less time than it would to reach a truly optimal decision.

The concept of bounded rationality has been tested in problem framing experiments. One of the most famous experiments testing the effect of bounded rationality due to problem framing was conducted by Tversky and Kahneman (1981). The pair created the Asian Disease Problem. The problem presents survival and mortality rates for a population faced with a new disease in a set of equivalency frames (two ways of presenting the same information). Respondents are asked two variations of the same question. The first is framed in terms of gains and the second in terms of losses. Then, respondents are asked to identify which options they prefer. The majority of respondents in this research moved from risk aversion in the first set of questions to risk taking in the second set, based on whether lives would be lost or saved. The researchers found that this pattern continued when they asked subjects about a variety of different topics. In

short, Tversky and Kahneman found that respondents paid more attention to whether the options were phrased in terms of risk or reward (life or death) than the actual statistics that were presented. Their findings strongly suggest that there are limits to rational thinking and that choice structures can easily be influenced by how the problem is framed. The research conducted by Tversky and Kahneman here and in later work serves as the primary foundation for many discussions of problem framing.

The findings from the Asian Disease Problem spawned a program of research on the influence of positive and negative language on our decisions. When problems are framed positively, in terms of rewards, gains, or life, then people are more likely to be risk averse. When those same problems are framed negatively, in terms of risk, losses, or death, people responding to the frames are more likely to be risk takers. The fact that people make different selections when the word choices are different violates the concept of rational choice. Rational choice presupposes consistency in response (Allison, 1971; Kahneman, 2011). These findings, however, led Tversky and Kahneman (1981) to develop the concept of prospect theory. Prospect theory recognizes that when people are considering risky choices, their choices may be influenced by how the choices are framed. This work was the first to identify that inconsistencies in decision-making might not be strictly related to emotional distractions (Kahneman, 2011).

Now, take a moment to think back to the previously mentioned chicken sexers. While the process of fast and frugal heuristics is exceptionally useful for chicken sexing and activities like speed chess, some researchers question whether our fast and frugal heuristic exercises are useful in all of the myriad of instances where we use them (Gladwell, 2005). It is important to remember that heuristics are most useful in areas that are predictable and where there is an

opportunity for feedback to ensure that the heuristics are being used in the proper way (Kahneman & Klein, 2009). While unconscious thought processes are useful for ensuring that our bodily processes continue to run, they may not be useful for making decisions about complex problems that have not previously been encountered. It has been centuries since we were faced with regular fight or flight challenges for which these heuristics were initially useful. Instead, today we are more likely to be presented with mentally challenging tasks that require careful thought and logic. Recent research suggests that some of our reliance on quick thinking may be based on emotional rather than trained thought (Taleb, 2004). In one study, respondents' brain activity was monitored by an fMRI scanner while they considered a collection of gain versus loss frames (DeMartino, Kumaran, Seymour, & Dolan, 2006). The researchers found that respondents who fell under the influence of the framing influences showed higher levels of activity in their amygdalas, an area of the brain known to be connected to emotions. Respondents who were able to see past the framing effects and make the rational selection had a higher level of activity in the anterior cingulate cortex, an area of the brain responsible for impulse control and rational cognitive functions, among other tasks.

In a similar vein, Kahneman and Klein (2009) have proposed that a distinction should be made between heuristic decision-making that is made by trained experts versus individuals who are using "good enough" heuristics. The pair note that framing activities conducted by experts typically originated as slow thinking activities that gradually became fast thinking heuristics, like the chicken-sexers. For experts, this transition is guided by consistency in the decision-making process and feedback about choices. This is in contrast to fast and frugal decision-making which links choices to previous experiences that are judged to be close enough to the current decision. Unfortunately, some people believe that they are experts in a field when they make a similar

choice multiple times because they have conducted that choice without obvious failures to tell them that they might be wrong. Reliance on these experiences may lead to the development of inaccurate heuristics.

Cognitive Traps

In the first work that Tversky and Kahneman (1974) published together, they highlighted three fast thinking heuristics and the biases that can accompany them. While heuristics allow us to make quick decisions with easily referenced frames, they may be based on inaccurate information or judgments. Biases, also known as cognitive traps, are systematic errors in framing problems that may lead to decisions that appear irrational or lack consistency with previous decisions (Tversky & Kahneman, 1974). The three heuristics identified by Tversky and Kahneman (1974) were representativeness, availability, and adjustment and anchoring. I will briefly discuss each of the heuristics and the potential biases that may be associated with them.

Representativeness is a thinking shortcut that evaluates the probability that A resembles or belongs to B (Tversky & Kahneman, 1974). If the probability that A resembles B is high then we can treat A as if it were B. Take for example, cases attributed to an unknown serial arsonist. If a new arson incident occurs in the same manner that previous incidents have occurred, then the new arson will be attributed to the unknown arson suspect. Biases associated with this quick-thinking frame include insensitivity to the potential base rate, the overall sample size, and predictability. Additionally, there can be misconceptions due to chance or regression as well as the illusion of validity of the representation.

The availability heuristic occurs when we judge the likelihood of A occurring based on how often we can think of A occurring in our experience. If you ask a recent auto theft victim about how often auto theft occurs, it is likely that he will think it occurs more often than an

individual who has not recently had his car stolen. This frame can increase the occurrence of bias due to the ability to retrieve information about certain occurrences, the effectiveness of the search protocol, and imaginability for occurrences for which we are not familiar. Additionally, there may be illusory correlation where the probability that two things occur together is overestimated.

The third heuristic identified by Tversky and Kahneman (1974) is the adjustment and anchoring heuristic. This problem frame identifies that people often start with a specific value, an anchor, to estimate the likelihood that something will occur and then, with the benefit of additional information, minutely adjust the value to the final estimate. If the original value is believed to be 50%, then, with additional information, their value will be adjusted slightly above or below 50%. Even information radically in contrast with the anchor will be unlikely to shift the final value too dramatically. Biases can be found with insufficient adjustment, issues with evaluating conjunctive and disjunctive events, and using anchors that are based on subjective probabilities.

In addition to these cognitive traps, a number of other thinking biases may influence our decision-framing activities. The identity fallacy suggests that big effects and big causes are related (Rossmo, 2009). If saturation police patrols are conducted in a high crime area and then crime drops, the identity fallacy causes us to say that the saturation patrols were responsible for the drop. The overconfidence in knowledge calibration bias suggests that when we know about issue A, but not B, we are more likely to select A as correct or as the best option (Stanovich, 1999). Because the local school board has spent the past three years collecting information about restorative justice for student violations of the conduct policy, it must be a better response than punishment for rule violations. This is similar to confirmation or verification bias, where we

cherry-pick evidence that supports A as being correct, while we negate information that might suggest that B is the right choice (Nickerson, 1998; Rossmo, 2009). Under belief perseverance, we maintain that A is right, despite the presentation of evidence that suggests the contrary (Rossmo, 2009). The self-serving bias leads to the claiming of responsibility for successes over failures and can be accompanied by the hindsight bias where it is claimed that the right answer was known all along.

Research has also been conducted on the process of priming respondents. In these cases, the researchers provide, or fail to provide, subjects with cues that might cause them to think differently about a subject and, accordingly, lead to different responses. Bless, Betsch and Franzen (1998) asked subjects to examine Tversky and Kahneman's (1981) Asian disease problem, but primed the problem in two different manners. Subjects either received a description of the problem labeled as a medical problem or as a statistical problem. When the problem was labeled as statistical (with a notation at the top of the page), respondents were more likely to respond correctly, or rationally, to both variations of the question. When the problem was labeled as a medical problem, respondents had more problems with the questions, similar to the results found by Tversky and Kahneman (1981). Gladwell (2005) also notes several examples of priming influences in tests of knowledge and intelligence. When priming exercises guide the respondent into a "smart" frame of mind before the questions, the respondents will perform better than if they were in a silly mindset. Further, when the respondents were asked questions that caused them to feel negative or defensive, they did not perform as well.

The influence of priming demonstrates how simple language or context changes can influence our framing of a situation. Tiny elements that may not appear to be directly related to the main task or problem can unwittingly modify our responses. One of the most common

places where we see evidence of the impact of framing biases, such as priming, is in surveys. Thaler and Sunstein (2008) describe individuals who develop surveys, or otherwise attempt to present choices for consideration, as choice architects. In the process of choice architecture, or framing choices, there is no neutral presentation process. Whether on paper, computer, over the phone, or in person, the potential for framing biases is widespread. According to Thaler and Sunstein, the presentation of information always biases the respondent to one answer over another.

Because of the potential for cognitive traps, some researchers recommend developing multiple problem frames to describe an issue and develop responses (Allison, 1971; Rossmo, 2009). The purpose of identifying multiple frames to explain a problem is to help identify strengths and weaknesses in the overall explanation of what is occurring. Multiple frames also help to ensure that one inaccurate frame does not mislead problem-solvers. Understanding the weaknesses among different frames can help to strengthen the final frame(s) that is selected.

Summary

Problem frames are general thought structures that allow us to organize shared theories and personal experiences to guide decision-making. Whether guided by heuristic shortcuts or theoretical longcuts, we are constantly applying frames to our choices. These frames then influence the responses that we select for our problems. When considering decision-making, it is important to be cognizant of the presence and influence of problem frames. Problem frames can influence our perception of social reality through both heuristic shortcuts and theoretical longcuts. Further, research has found that when under the influences of certain types of problem frames, audiences may select seemingly irrational choices. There are also a variety of cognitive traps and biases that may influence our selection of problem frames.

This chapter has provided a background on the presence and influence of the tools for organizing our shared theories and personal experiences for decision-making. With this knowledge, we can improve our problem framing techniques in a variety of problem-solving situations. In the next chapter, I will move to our other primary issue of interest: problem-oriented policing. In the results section of this text we will combine the background on problem framing and problem-oriented policing and the findings of the research to devise recommendations for future work. This process is representative of a criminological problem framework, crime science. The crime science framework encourages us to take the lessons of other fields and integrate them into our work on crime to devise better response strategies. In the following chapters we will gain a better sense of how this might occur.

Chapter 3 – Problem-Oriented Policing

This section will introduce police problems and problem-oriented policing. Problem-oriented policing is a style of policing that encourages the police to move away from the traditional police problem frame and to explore alternatives. The POP process emphasizes the importance of thoroughly exploring known facts about crime problems and analyzing a wide variety of causal factors. This process is typically guided by one or more problem frames, which may be modified as the results of the analysis become available. Only after the problem has been fully examined can the police develop an appropriate response, based on the problem frame(s) that seem to best explain the problem. After the problem response is conducted, the POP process encourages the police to assess the effectiveness of the response. If the response was not effective, then the analysis and response may have been guided by the wrong problem frame. This chapter will provide an overview of the problem-oriented policing process as well as discuss how officers learn about new problem frames.

Problem-Oriented Policing

Historically, the police were tasked with crime control and order maintenance responsibilities (Eck & Spelman et al., 1987). The police were primarily responsible for responding to criminal acts and often only prevented crimes through luck, rather than planning (Goldstein, 1990). This resulted in most police using the traditional policing framework, also known as the standard model of policing. Police officers were trained to be reactive, incident-driven, and offender-focused, using a one-size-fits-all response to crime (Weisburd & Eck, 2004). Under this frame, the arrest of an offender was the ultimate sign of success. In the middle of the twentieth century, however, there were a series of reforms in American policing and changes in general society that created new expectations of the police. The traditional

practices of the police (e.g. random patrol, rapid response to calls, follow-up investigations, and intensive-enforcement policing) had begun to be proven ineffective at reducing crime (Weisburd & Eck, 2004). And, in the 1970s, many police agencies were compelled to add social service provider and crime preventer to their task list (Eck & Spelman et al., 1987; Goldstein, 1990; Scott, 2000). To be effective in these new roles, however, officers needed more than the traditional policing framework to respond to the additional responsibilities.

The concept of problem-oriented policing, introduced by Herman Goldstein in 1979, grew out of the change in expectations of the police. Problem-oriented policing encourages a shift in police management that moves the focus of policing from the means to the end results, from inefficiently responding to individual crime events to proactively reducing recurrent community crime problems (Goldstein, 1979; 1990). In 1979, Goldstein highlighted five new developments in policing and society that signaled that it was time for a shift in the focus of police work. These developments included: a financial crisis, new research on the impact of traditional policing methods on crime, a need for greater consumer/community focus, recognition that efficiency and effectiveness are not synonymous, and increased resistance to change among police officers (Goldstein, 1979: 239-240). Goldstein and Susmilch (1981) expanded the list to include the importance of preserving and institutionalizing the police role in responding to community problems, a role that is often shirked by other community and government agencies. These issues were then, and today continue to be, motivations for improving the methods of policing.

To reflect the changing expectations of the police, Goldstein created a new definition for police problems. Goldstein initially identified police problems as "the incredibly broad range of troublesome situations that prompt citizens to turn to the police" and, ultimately, "the essence of

police work" (Goldstein, 1979: 242). He later provided more specification for the definition, describing problems as "a cluster of similar, related, or recurring incidents rather than a single incident; a substantive community concern; [and] a unit of police business" (Goldstein, 1990: 66). This definition was further refined by Eck and Clarke (2003). The pair identified problems as "repetitive harmful events in the community that the public expects the police to address" (Eck & Clarke, 2003: 8). They then went on to introduce the CHEERS acronym for police problems. The acronym identifies that problems occur in a Community where there is Harm and that the public has an Expectation that the police will respond to the Events that are Repetitive/ Recurring and Similar (Eck & Clarke, 2003: 14).

Goldstein classifies police problems as a unit of work (Goldstein, 1990). In contrast to responding to individual incidents, police may also respond to multiple incidents grouped as a distinct problem. There are three elements that are unique to police problems (Eck, 2003; Goldstein, 1979; 1990). First, police problems encompass a group of incidents, crimes, and/or activities. Police problems do not involve individual events. Second, the incidents are related to each other and are similar in nature, likely stemming from the same opportunity source. Related to items one and two, research has repeatedly shown that a large proportion of crimes are clustered in space by a small proportion of offenders and against a small proportion of victims (Cohen & Felson, 1979; Farrell, Tseloni, & Pease, 2005; Sherman, Gartin, & Buerger, 1989; Wolfgang, Figlio, & Sellin, 1972). Third, police problems are of concern to both the community and the police. They are not social issues that only interest the community and they are not administrative issues that are only of concern to the police. Historically, such problems have not been the primary concern of police departments and officers. Policing was traditionally focused on individual incidents and, as a result, has been largely reactive (Goldstein, 1979). Goldstein

believed that if the police turned their attention to groups of incidents that were similar in nature, then they could become more effective at preventing crimes, rather than only responding to crimes. It has also been suggested that the focus on problems, a collection of incidents, requires a diverse group of officer skills, thus elevating the project above mere incident response (Boba & Crank, 2008).

The study of police problems has been compared to epidemiology, the study of diseases and injuries (Eck & Spelman et al., 1987; Scott, 2003). Like epidemiologists who identify a group of people with the same disease that should be treated in a similar manner, problem-oriented police officers can take a group of offenses and treat them in the same manner to more effectively cure the crime disease (Robertson, 2007). Such a process is more efficient than trying to handle each incident individually. Further, if an effective cure is found, it may allow the police to inoculate some areas of the community from future danger of disease.

Conducting POP

The problem-oriented approach encourages the police to use the scientific method in policing projects (Tilley & Laycock, 2014). The scientific method is a systematic process for examining questions or problems. The method generally begins with an observation that leads to a question. The question is developed into a hypothesis and a prediction about that hypothesis, based on current knowledge. Then a test is undertaken to determine if the hypothesis and predictions are correct. Finally, a review is conducted to examine the results and compare them to other findings. Goldstein believed that applying the scientific method to policing would improve the quality of problem-focused projects. In his words, the police needed to focus on:

> identifying these problems in more precise terms, researching each problem, documenting the nature of the current police response, assessing its adequacy and the adequacy of existing authority and resources, engaging in a broad exploration of alternatives to present responses, weighing the merits of these alternatives and choosing from among them (Goldstein, 1979: 236).

The process introduced by Goldstein appeals to common sense. Further, it causes one to wonder why the police were not already doing similar work (Eck, 2004). However, traditional policing was largely focused on individual calls for service where the desired response was an arrest of the individual responsible for that crime. Individual events do not require an assessment of the standard response or encourage a search for alternative responses. Individual events also do not require that the police explore the theoretical cause of the crime, such as opportunity, conflict, or learning. The change in focus to groups of recurring problems, where problems, behaviors, and environments are key, requires police officers to employ a completely different problem-solving process. This change also requires officers to expand their frameworks for interpreting crime problems. Such a process may not be either familiar or comfortable for many police officers (Townsley, Johnson, & Pease, 2003).

Since the introduction of problem-oriented policing, several frameworks for conducting the scientific method in POP have been developed. These are not to be confused with frameworks that help us to understand problems – a topic that will be discussed later. Frameworks for conducting the scientific method guide our problem-solving work. Eck, Spelman, and colleagues (1987) created the SARA (scan, analyze, respond, and assess) problem-solving process to aid officers as they worked through the problem-oriented approach in an early POP project in Newport News, VA. In the UK, where problem-oriented policing is especially popular, several different models are available to describe the application of the scientific method in policing. Sparrow (2000) expands the scanning and response steps in SARA in his

stages of problem-solving. Read and Tilley's (2000) ProCTOR model focuses on Problems, Causes, Tactics/Treatments, Outputs, and Results. Ekblom's (2005) 5I's of the crime prevention process include: intelligence, intervention, implementation, involvement and impact. Finally, Henson's (2013) PARTNERS model highlights the need for Problem/ Partner identification, Aims, Research, Thinking creatively, Negotiating changes, Evaluations, Recognition/ Rewards, and Sharing. In an effort to better portray the recursive SARA process, Sidebottom and Tilley (2011) suggest a revision of the SARA to something similar to $(SARA)^{sara}$. They suggest that at each phase in the SARA process a small-scale "sara" effort should occur. For example, during the scanning phases when the problem is defined, officers should scan, analyze, respond, and assess their efforts to define the problem properly.

Each of these models provides a framework for operationalizing the use of the scientific method in the problem-oriented approach. The models provide officers with different perspectives for approaching their work and attempting to solve problems. In different situations, different models might serve as more useful guides through the process. Ultimately, however, they are guides; they do not define problem-oriented policing.

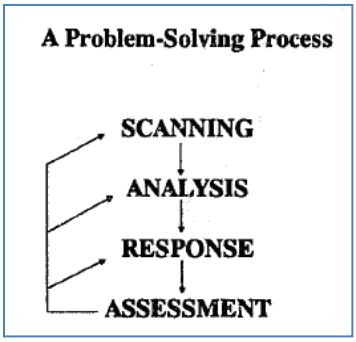
SARA

Among the problem-solving frames, the SARA process is the most well known, potentially for its simplicity and initial association with Goldstein's work (Sidebottom & Tilley, 2011). Additionally, the SARA process is the basis for the review of the Goldstein and Tilley Awards, two awards for excellence in problem-solving. Due to its popularity and simplicity, I will use the SARA problem-solving framework to explain the process of problem-oriented policing. It is important to remember that SARA is a problem-solving framework, it is not a

framework for explaining problems. Frameworks for explaining crime problems might include routine activities, crime patterns, or situational crime prevention.

Following the initial introduction of problem-oriented policing, the Police Foundation worked to integrate problem-oriented policing into law enforcement agencies during the 1980s. Through work with the Newport News Police Department, Eck, Spelman, and colleagues (1987) crafted the acronym SARA to guide problem-solvers through the scientific method that was at the root of the problem-oriented policing process. The four phase process to scan, analyze, respond, and assess, was a simple template for approaching problem-solving projects (see Image 1). The goal of the recursive model was to ensure that problem-solvers took care to properly frame their problems and related responses and then evaluated the results to determine if they were successful, based on constantly evolving information. One of the most important elements of the model, as identified by the arrows in Image 1, is the fact that it is not four individual steps, but a looping model that may need to go through several full or partial cycles before it is complete (Tilley, 2010). The recursive nature of the process allows for the problem to be reframed as more information is learned about the factors contributing to the problem.

Image 1: Problem-Solving Process (or the SARA model)
(from Eck & Spelman et al., 1987)



The SARA model begins with scanning for problems. During this phase a problem is brought to the attention of the police. The problem may be identified by the police themselves or introduced to them by a member of the community or local government. The problem should meet the requirements for a police problem as identified by Goldstein (1990) and Eck and Clarke (2003), thus consisting of a group of incidents that are of concern to the community and to which the community expects the police to respond. The scanning phase involves both the general identification of a problem as well as an initial refinement of the problem, to ensure that it is truly a police problem. The scanning phase will also provide the police with their first sense of the framework(s) of the problem, which will guide their later efforts.

Once the problem has been identified, the police will collect and analyze data to determine its scope and further refine the definition of the problem. During the analysis phase, data is collected from as wide of a variety of sources as is necessary to fully understand the causes and symptoms of the problem. This step includes reviewing both quantitative and qualitative data from the police department, other government agencies, and the community (Eck & Spelman et al., 1987). During the analysis phase the definition of the problem and the problem frame may be revised to fit the new information that has been learned about the problem.

When the police feel that they have a firm understanding of the problem, its characteristics, and the frame(s) that they feel best explains the problem, they will begin to develop responses to reduce or eliminate the problem. The problem frame(s) and the facts of the problem will guide the development of a response or, in many cases, responses. Many police problems are created by the interaction of factors related to offenders, victims, and the places where crimes occur. As a result, it may be necessary to devise a response strategy that attempts

to alter both behaviors and environments in a variety of different ways (Eck & Clarke, 2003). When officers use alternative crime frames to respond to problems they are able to increase the number of potential responses that are available to them. Where officers using the traditional police frame might only see insurmountable challenges, POP officers can see a wide variety of possible responses guided by their alternative frames.

After the responses are implemented it may be necessary to conduct more analysis, further redefine the problem, or modify the responses so that they better fit the revised definition of the problem. Then, after a thorough implementation of the first three phases, an assessment of the overall process can be conducted. This assessment will evaluate how well the problem-oriented approach was implemented as well as determine whether or not the project was responsible for a change in problem levels.

Throughout the remainder of this text, the SARA process will be the problem-solving framework that I use to describe how police conduct problem-oriented policing. Although its simplicity has been criticized (Ekblom, 2005) and the circular nature of the process overlooked (Clarke, 1998 on Goldstein; Eck & Madensen, 2012), it remains the most attractive guide for police practitioners engaged in problem-oriented policing (Sidebottom & Tilley, 2011).

Problem Frames

While the SARA model will serve as the framework for carrying out problem-oriented police work, an entirely separate group of problem frames will be used to describe why crimes occur and what responses should be undertaken to reduce crime. The problem-oriented approach does not advocate for one specific problem frame to respond to crime problems. This is in contrast to community-oriented policing, broken windows policing, or zero tolerance policing, among others, which encourage the adoption of a specific problem frame. The POP approach

merely encourages officers to consider a variety of different frames, including both alternative and traditional frames (Goldstein, 1990). Goldstein (1990) does not advocate the elimination of the traditional police responses from the list of potential frameworks to describe or respond to a problem. The traditional police frame should be considered as one of a long list of framing options. The adoption of any potential frame, however, should be based on sound research and theory (Goldstein, 1990).

Crime and policing problem frames are ultimately based on theories of crime; these theories should guide the problem analysis and response efforts. The problem frames will then help link the identification of a problem to a response solution (Eck, 2003; 2004). Officers should consider a variety of alternatives to explain the problem, which will likely lead to the consideration of a variety of problem frames. Choosing from among alternatives allows officers to consider the costs and benefits of each and to consider incorporating aspects of several different frames into the response to achieve the greatest reduction in crime and disorder (Scott, 2006; Weisburd & Eck, 2004).

After many years of working with the traditional policing frame or another specific frame, officers who are invited to try the POP approach may find themselves overwhelmed. If the problem-oriented approach does not identify the frames that should be used to respond to crime problems, then how do officers know which frames they should use? This question gets to the crux of one of the implementation problems of problem-oriented policing. When officers approach a POP project, they know that they can use SARA (or another problem-solving model) to guide their work and they know the definition of a police problem. However, they may not know where to turn to identify a problem frame that describes why certain crimes occur and what

to do about them. Such a situation may cause an officer to turn back to the traditional policing framework.

However, there are several different resources available to officers to provide them with alternative frames. First, officers should have a basic introduction to theories of crime during their training academy. Second, trainings and information sessions on theories of crime may be presented to officers during in-service programs or roll-call trainings. Outside of their department, officers can access resources about theories of crime through the large collection of problem guides produced by the Center for Problem-Oriented Policing (POP Center at www.popcenter.org). The POP Center also hosts an annual conference and award program that highlights the best examples of problem-oriented policing throughout the world.

Officers who conduct problem-oriented policing should be well versed in the POP process and the crime frameworks that may help to solve the problems. Although at first the use of these frames may be relegated to System 2's slow thinking, over time, these pieces of knowledge should become heuristics that are invoked in fast thinking. In effect, officers trained in problem-oriented policing slowly transition into environmental criminologists, ready to cite applicable crime frames when they identify a problem.

Bearing all of this in mind, I now turn to some of the likely crime frames of problem-oriented officers. Although the diversity of frames of POP officers has not previously been examined, anecdotal evidence suggests that the frames that are used by POP officers are theories of environmental criminology and crime prevention (Goldstein, 1990; Scott, 2000). Problem-oriented officers may also turn to more traditional governmental frames, such as regulation, or be guided by knowledge of empirical regularities, such as the Pareto principle. In some situations, however, it has been reported that officers skip over the identification of a specific problem

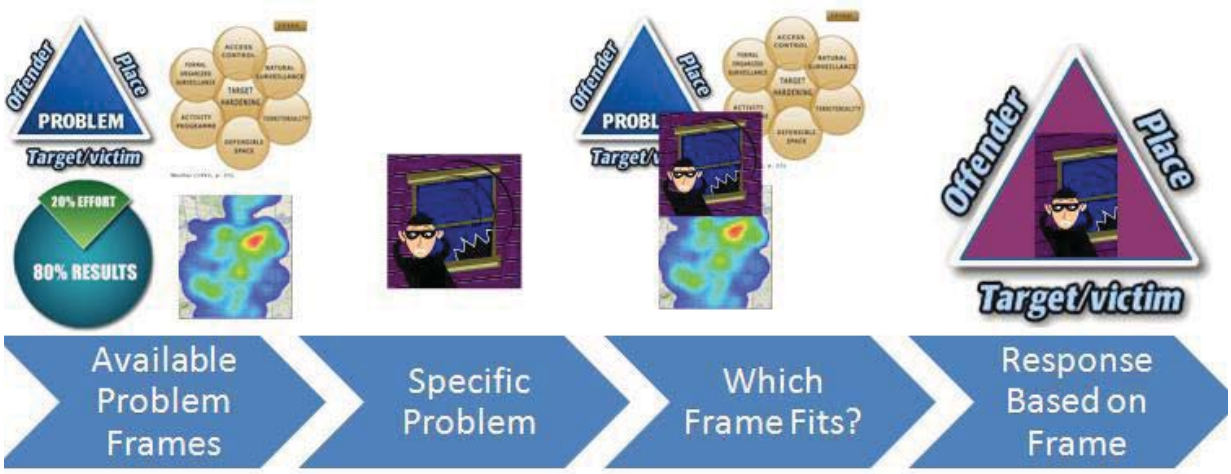
frame and quickly develop a response (Bichler & Gaines,2005; Graziano et al., 2013; Scott, 2000). In these situations, officers may decide that if 1) there is a crime problem, then 2) an organizational or administrative change (e.g. special units or task forces) or community crime prevention trainings or materials should be delivered, without otherwise analyzing the problem.

Based on all of these elements, a list of potential problem frames for problem-oriented policing may include:

- Situational crime prevention;
- Routine activities and the problem analysis triangle;
- Repeat victimization and hot spots policing;
- Rational choice;
- Broken windows;
- Focused deterrence (pulling levers);
- Crime prevention through environmental design;
- Defensible space;
- Place management;
- Risky facilities;
- Pulling levers;
- Regulatory politics;
- Crime prevention education and training;
- Pareto principle (also known as the 80/20 rule); and
- Administrative/ organizational responses.

The frames that are selected to explain police problems will help to organize both thoughts and behaviors. Not only do they guide the problem analysis effort, but they will contribute to the identification of potential responses. Figure 3 provides a modified version of the frame building example provided earlier at Figure 1. Here you can see how specific crime frames can help to interpret crime problems.

Figure 3: Problem Framing Process



Challenges to Using New Crime Frameworks

Problem-oriented policing has been found to be an effective process for reducing crime and disorder problems (Weisburd, Telep, Hinkle, & Eck, 2010). However, numerous studies have also cited the difficulties that police officers face when trying to conduct POP projects. In particular, officers have difficulty breaking away from their traditional policing framework and embracing alternative problem frames (Cordner & Biebel, 2005; Goldstein, 1990; Graziano et al., 2013). There are multiple explanations for weak problem framing in problem-oriented policing. The first suggests that problem investigators believe that they know what the problem is and what causes it, so they immediately jump to a response without further analysis (Bichler & Gaines, 2005; Clarke & Goldstein, 2003; Cordner, 1988; Eck, 2004). Police officers may have both previous experiences and personal biases which may lead them to frame crime problems in a particular way (Capowich & Roehl, 1994). This may be a result of the availability heuristic, an overconfidence in knowledge calibration, or another form of cognitive bias (Stanovich, 1999; Tversky & Kahneman, 1974). Although these experiences may help to explain what is occurring in a particular situation, they may also mislead officers in their efforts. When officers act only

upon their initial understanding of a problem, they are developing a one-dimensional problem frame that may not fit the actual crime problem. The problem-oriented approach encourages officers to confirm with data what they believe to be true. Problem frames must be built on facts relating to the problem or the resulting response may not be effective.

A second challenge comes from confusion among officers about frames, resulting in an inappropriate application of a crime frame (Scott, 2006). Even with a wide variety of potential problem frames available to help examine and respond to crime problems, not all police officers are aware of these frames. Additionally, they may not thoroughly understand the basis of the frame or the theory behind it. As a result, there may be miscommunication and confusion between officers who have different understandings of the problem framework. This is heightened when officers who typically work solely under the traditional framework are brought together with officers who apply alternative frameworks (Grinder, 2000). The officer who only uses the traditional framework may believe that the only way to respond to a problem is to identify and arrest the offender. However, an officer working under alternative frameworks may believe that by interrupting crime opportunities they are able to also reduce crime, without arresting a single individual. Further, the ability of an officer to communicate how the problem frame will influence the analysis and response cannot be overstated. Even among officers who regularly use alternative frameworks, it is necessary to discuss the frame(s) that they believe best matches the problem and why. They may even need to discuss why other frameworks are not helpful in the situation. This discussion about problem framing will improve the understanding of the problem for all officers involved and increase the likelihood that the responses will match the problem.

Third, when officers are encouraged to take on POP projects, or assigned to projects, they may be resistant to introduce new work into their daily routines when they are already overworked (Cordner & Biebel, 2005; Eck & Spelman et al., 1987). Traditionally, police officers are resistant to change as they have seen many fads come and go with the whims of funding authorities (Eck, 2004; Goldstein, 2003; Skogan et al., 1999; Webster & Connors, 1993). As a result, they may be unwilling to adopt a new program until they have seen evidence that their department is dedicated to the initiative. Evidence might come in the form of support throughout all levels of the agency for POP, including evaluation and promotion requirements associated with POP. Without such evidence, officers will question the need to have a potentially drawn-out process to examine and respond to groups of problems when they traditionally have focused on responding to incidents and arresting offenders.

Additionally, while the idea of problem-oriented policing is based on the scientific method, policing is not known as a field that regularly embraces the latest scientific findings (Weisburd & Neyroud, 2011). The majority of police practices are based on tradition and public expectation rather than scientific proof (Eck & Spelman et al., 1987; Weisburd & Neyroud, 2011). Scientific experimentation is believed by many police officers to be slow and uncertain process that is in conflict with the quick, decisive actions that are required of the police (Townsley et al., 2003). Additionally, much research on the police is conducted under the blanket of politics. When the political winds change, so does the emphasis of the research. Such shifts can make police hesitant to embrace new research.

Finally, research on problem-oriented policing also suggests that framing activities may be weak because the police conducting the problem-oriented efforts do not have the skills necessary to conduct a thorough analysis and/or do not involve individuals who specialize in

analysis (Boba, 2003; Bullock, Erol, & Tilley, 2006; Bynum, 2001; Eck, 2004; Scott, 2000; Weisel, 2003). The problem framing process in problem-oriented projects is not limited to a quick review of data by the officer in charge in order to develop a response. The process invites an in-depth investigation of the problem (Scott, 2000), an investigation which may overwhelm or intimidate. Crime analysts or academic researchers may be called upon to aggregate the data that is collected and provide initial summaries. Crime mapping may be needed to define the spatial components of a problem (Braga, 2010a; Scott, 2000). Surveys of the community and/or affected interests and interviews with community, government, and police officials with intimate knowledge of the problem may also need to be consulted. Without this process, the primary framework that is adopted may be not be the best choice for achieving crime reduction goals.

Unfortunately, most of the published reports of problem-oriented efforts provide us with little information about the specific process for selecting problem frames for successful projects (Bullock et al., 2006; Weisel, 2003). Due to this lack of understanding about how to identify and select useful problem frames, there is on-going confusion about how to fully conduct problem-oriented policing.

Summary

This chapter provides an introduction to police problems and problem-oriented policing. Problem-oriented policing is a mindset for responding to police problems. This mindset encourages police officers to apply the scientific method to crime problems that have proved to be particularly resistant to traditional police responses. This process can be compared to epidemiology, the study of diseases and injuries within a population. The goal of the problem-oriented approach is to effectively and efficiently eradicate the crime disease. Through scanning and analysis the police identify the elements of a crime problem and identify a framework that

could guide the problem response. The assessment process then determines whether or not the frame led to a reduction in the crime problem. The study of problem framing in problem-oriented policing will help us to better understand the criminological and criminal justice theories that are guiding the work of the police in their problem-solving efforts. Future work may even be able to identify whether some problem frames are more effective at reducing certain types of crime or disorder than others.

Chapter 4 – POP in Action

This chapter will present research that has been conducted to evaluate problem-oriented policing efforts and identify the characteristics of officers involved in problem-solving work. In the last chapter I provided a great deal of information about the process of problem-oriented policing. However, I did not answer the following questions: Does it work? and Do POP officers frame problems differently? In this chapter I will provide a summary of the research examining whether or not problem-oriented policing is a useful response. I will also examine research that has identified characteristics of officers involved in problem-oriented policing specifically and problem-solving work in general. Finally, I will discuss previous reviews of problem-oriented policing projects submitted to the Goldstein and Tilley Awards. Following this review of research on problem-oriented policing, Chapter 5 will then provide examples of problem framing research in policing and how it could be connected to problem-oriented policing. Together, these two chapters will provide a foundation for developing a focus on problem framing within problem-oriented policing.

Problem-Oriented Policing: Does it Work?

The first generation of literature on problem-oriented policing was undertaken to introduce the process and its benefits. This work includes Goldstein's initial article to introduce problem-oriented policing and his 1990 text that expanded upon the problem-oriented approach. Eck and Spelman's (1987) work in Newport News and related pieces from Baltimore County, MD, demonstrated how the problem-oriented approach could be applied (Eck and Spelman, 1987; Cordner, 1988). Subsequent works have demonstrated strengths and weaknesses in efforts to implement problem-oriented policing and identified effective projects.

There is now a wealth of literature discussing the problem-oriented policing process, its strengths and weaknesses, and examples of problem-oriented policing projects. This work has resulted in officers throughout the United States, the United Kingdom, and segments of Europe becoming aware of problem-oriented policing and its potential (Knutsson, 2003; Lum, Telep, Koper, & Grieco, 2012; Wartell & Gallagher, 2012). At the start of the 21st century there were several pieces that summarized the research on problem-oriented policing thus far, including works in the Crime Prevention Studies series. These pieces are best summarized by Scott's (2000) review of the first twenty years of problem-oriented policing. Scott's review identifies that there has been enormous success in making problem-oriented policing a recognizable policing strategy. He does, however, also go into great detail about the wide variety of weaknesses in work conducted under the POP name.

Despite the extensive application of problem-oriented policing, there are some questions about whether the process is effective at reducing crime because many success stories are anecdotal. In a 1997 review of what works in preventing crime, problem-oriented policing was identified as a promising strategy, not yet a successful one (Sherman et al., 1997). To examine this concern, an extensive meta-analysis of problem-oriented policing projects was conducted by Weisburd and colleagues (2010). The goal of the evaluation was to identify whether problem-oriented policing efforts significantly reduced crime and disorder. The team identified more than 5,500 POP projects to be considered for the review. However, only ten projects met the rigorous evaluation requirements for the scientific review. The review found that the ten projects led to a modest, but statistically significant, reduction in crime and disorder. The researchers also noted that a wider collection of less rigorously evaluated projects also supported the belief that the problem-oriented approach was effective at reducing police problems.

The findings of the POP meta-analysis and other reviews of problem-oriented policing highlight the difficulty of integrating the scientific method and statistical evaluation into policing efforts (Scott, 2000; Tilley, 2010; Weisburd et al., 2010). This concern has stemmed numerous debates about whether it is more important for problem-oriented policing to be a practical or a scientific process (Braga, 2010b; Eck, 2002; 2006). Many practitioners argue that both organizational constraints and the problem-specific nature of their work limit their ability to conduct rigorous scientific evaluations of their work. Researchers then note that they can't evaluate the effectiveness of the process if thorough evaluations are not conducted. A balance must be found between the two points where the research can be flexible enough to respond to practical demands, but still allow for some level of assessment to statistically confirm project successes (Braga, 2010b; Eck, 2002).

The research to date on problem-oriented policing has documented the process, determined that the process can be claimed as effective for reducing crime, and provided a wealth of examples about where the process can be used. A second generation of research on problem-oriented policing is slowly growing that aims to revise the concept of problem-oriented policing and refine its uses. However, this research needs to be connected to practice to gain traction. Second generation research includes the efforts to integrate the process of problem-oriented policing with the theories of environmental criminology, such as situational crime prevention, routine activities theory, and repeat victimization (Braga, 2010a Eck, 2006; Eck & Clarke, 2003; Eck & Madensen, 2012). Second generation work also includes the increased focus on problem-oriented policing as a crime science, an area that is not solely limited to criminal justice and criminological research, but also integrates research from other scientific fields, such as medicine, biology, economics, and psychology (Goldstein, 1990; Laycock, 2005).

New areas of emphasis in problem-oriented policing may also include reframing the evaluation processes, reconsidering the organizational imperatives of the process, and identifying new ways to educate the field about the process.

One of the goals of second generation research is to expand practitioners' understanding of how to conduct problem-oriented efforts. For example, Eck (2003), Scott (2006), and Bullock (2007) highlight the fact that traditional POP evaluation processes have largely failed to document how problem-oriented policing is applied. All three lament the fact that many evaluations focus on how well the approach was instituted at the organizational level, instead of examining how projects were actually implemented at the line level. Bullock (2007) notes that these top-down evaluations focus on what was supposed to occur, which does little to explain how problem-oriented policing actually occurs. Such evaluations may focus on deficiencies of organization and technology rather than problem-orientation. The small body of literature on police officer background and training in relation to problem-solving and problem-oriented policing (highlighted in the next section) is the primary area where researchers attempt to gain a bottom-up understanding of POP implementation (Cordner & Biebel, 2005; Ikerd, 2010a). Although top-down evaluations are the primary assessment method, there is also a need for other types of quantitative and qualitative reviews to fully understand the POP implementation process. These reviews will then help us to better understand why some POP projects fail to achieve their goals (Scott, 2006).

Officer Characteristics Related to Problem-Oriented Policing

Prior research on problem-oriented policing shows that the practice is modestly successful. However, our understanding of the elements that contribute to its success is weak. Since the 1970s, policing research in general has paid increasing attention to how the personal

and professional characteristics of police officers influence their work. Much of this research focuses on the elements that contribute to a successful patrol officer (i.e. an officer without complaints or disciplinary actions). Studies specifically related to the characteristics of officers who regularly engage in problem-oriented policing are limited. However, there is a small body of literature that examines the individual characteristics that are related to general problem-solving actions. This research is a starting point for better understanding the characteristics of officers who are interested in and successful at problem-oriented policing.

In a one of a kind study, Cordner and Biebel (2005) conducted a series of surveys and interviews with officers in the San Diego Police Department[1]. The San Diego Police Department was one of a few in the country that attempted a department-wide integration to problem-oriented policing. The researchers found, in line with previous anecdotal notes, that officers' POP efforts were primarily focused on small-scale problems where little analysis or assessment was conducted. Over 20% of officers noted that they needed both more time and more assistance to conduct POP efforts. More than half of the survey respondents felt that it would be somewhat or very effective to have a few officers focus on POP work, while the majority of officers would be relieved from problem-oriented efforts. On a similar note, when rating their individual enthusiasm for problem-oriented policing, there was a division among officers, with almost half rating their enthusiasm as high and half rating their enthusiasm level as low. When officer demographics were compared to POP enthusiasm levels, the researchers found few significant differences. The researchers did note that officers who were older and had more experience had an unfavorable opinion of problem-oriented policing, although older officers with

[1] This study specifically questioned officers about their problem-oriented policing work, their feelings about problem-oriented policing in their department, and their personal characteristics. Other research has integrated comments from officers about problem-oriented policing work, but has not linked this data to personal characteristics (Eck & Spelman et al., 1987; Ikerd, 2010a; 2010b).

less experience (had entered policing at a later age) had more enthusiasm. However, sergeants had a positive attitude about the problem-oriented approach, even though they were typically more experienced officers.

The majority of the research on officer attributes related to problem-solving has been carried out in connection to community-oriented policing research rather than problem-oriented policing. However, these findings could be relevant to both areas. The Project on Policing Neighborhoods (POPN) studies in Indianapolis, IN and St. Petersburg, FL examine a number of officer characteristics related to the implementation of community-oriented policing, including problem-solving. The POPN data includes a large collection of observations of officer activities. In a review of the POPN data, Dejong, Mastrofski, and Parks (2001) identified differences related to problem-solving between officers assigned to community-oriented policing units versus those who were not. Here, the researchers found that even when problem-solving efforts were promoted department-wide, officers who were specifically tasked with community policing (CP) activities spent a greater amount of time conducting problem-solving activities than those not assigned to the CP units. Further, CP officers were more likely to spend time on problem-solving activities if they 1) were interested in promotion, 2) believed that their district manager felt it was a priority to focus on repeat call locations, or 3) felt that their peers were focused more on enforcement than problem-solving. These variables did not increase the problem-solving activities of non-CP officers. CP officers with a college degree spent less time on problem-solving activities than those without a college degree. Officers who were not assigned to CP posts were generally less motivated to spend time problem-solving. Although the measures are slightly different, these findings echo those of Cordner and Biebel (2005) that suggest that there

is a distinction between how officers feel about problem-solving based on whether or not they are actively engaged in problem-solving.

Engel and Worden (2003) also reviewed the POPN data, specifically focusing on the influence of supervisors on officers' involvement in problem-solving efforts. The pair found that the officers in the study spent 1.6 times longer on problem-solving activities when they believed that it was an important priority for their supervisor than when the officers themselves believed problem-solving was a priority. However, the study also found that officers had trouble accurately identifying the priorities of their supervisors, suggesting that the supervisors did not effectively communicate their priorities to officers.

There are several constants that are found throughout the literature related to problem-solving officers. Officers involved in problem-solving and problem-oriented policing consistently express frustration that they do not have enough time or support to conduct the efforts. This experience was voiced in the early research in Newport News and continues to be heard today (Eck & Spelman et al., 1987; Cordner & Biebel, 2005). This frustration can also be found in both large and medium-sized police departments (Cordner & Biebel, 2005; Lord & Friday, 2008). Further, the research literature suggests that there are certain types of officers who are more interested and/or more effective in problem-solving efforts than others (Cordner & Biebel, 2005; Dejong et al., 2001; Grinder, 2000). If the POP philosophy is not carried out agency-wide, then efforts should be made to identify officers who have both interests and skills that may support the problem-oriented policing approach.

How Do Officers Learn About Problem-Oriented Policing?

Previous research suggests that extensive training and organizational changes are needed for officers to successfully adopt problem-oriented policing (Cordner & Biebel, 2005; Eck &

Spelman et al., 1987). Without such efforts, officers will revert to traditional policing responses when faced with crime problems (Goldstein, 1979; Bichler & Gaines, 2005; Skogan et al., 1999). As we discuss the characteristics that are related to officers who conduct problem-oriented policing projects, it is also important to briefly mention how officers learn about such programs.

Cordner and Biebel's (2005) study of San Diego police officers highlights the variety of ways that officers might learn about problem-oriented policing. They report that the majority (74%) of officers in the department received some form of advanced officer training about problem-oriented policing. Much smaller proportions of officers received training about problem-oriented policing during special trainings (27%), recruit training (27%), or roll call training (17%). Ten percent of officers interviewed had also attended the annual problem-oriented policing conference which, from 1990 to 2003, had been hosted by the San Diego Police Department. Eck and Spelman (1987) also discuss the need for problem-oriented policing education to be integrated into training during police academies, within the field training process, as well as during in-services.

While formal training about problem-oriented policing is useful, research also suggests that officers learn a great deal about their work through socialization with other officers (McNulty, 1994). Previous research has identified that police officers often feel isolated from the general public because of the nature of their work, and, as a result, the lessons that they receive from other officers are very important in shaping their work personalities (McNulty, 1994; Paoline, 2003). The general policing literature has also highlighted the importance of sharing information about what works across agencies (Weiss, 1997). Scott (2000) encourages increased socialization efforts among officers focused on problem-oriented policing and between POP officers and academic researchers involved in problem-oriented policing. Such efforts

could improve officers' understandings of uses of problem-oriented policing and problem frames as well as the practical limitations of the process. The literature within problem-oriented policing largely fails to discuss the importance of socialization among agencies on transmitting problem-focused knowledge.

POP Implementation: English and American Experiences

The United States and the United Kingdom are the two countries with the highest documented number of problem-oriented policing projects. Several researchers have noted the differences in application of POP between the US and the UK (Bullock et al., 2006; Sidebottom & Tilley, 2011; Tilley & Scott, 2012). In the UK, problem-oriented policing work is conducted under the auspices of the Crime and Disorder Act of 1998. This act strongly encourages the government and the community to work together to solve crime problems, recognizing that one agency alone cannot be responsible for fixing society's ills (Tilley, 2010). As a result of this regulation, within the UK the POP acronym may also stand for problem-oriented partnerships or problem-oriented policing and partnership (POPP) (Sidebottom & Tilley, 2011). The inclusion of POP in the Crime and Disorder Act has also led to the process receiving a greater amount of attention and wider implementation in the UK than in the US (Tilley & Scott, 2012). In fact, a review of submissions for the Tilley Award for excellence in problem-solving in the UK found that all but a handful of British policing agencies have participated in the program (Bullock et al., 2006). Further, the regulation of POP has resulted in funding being made available for departments carrying out unique POP projects in their jurisdictions. In the US, where the program is not promoted in federal regulations, the awareness of the problem-oriented approach and participation in the program is not nearly as universal. While an American study on POP use within all police departments is not available, a 2007 study of US law enforcement agencies

found that approximately 29% of agencies actively encourage their officers to engage in "SARA-type problem-solving activities" (US DOJ, 2011).

Other Research on Problem-Oriented Policing: The Goldstein and Tilley Award Collections

The Center for Problem-Oriented Policing (POP Center) has the largest collection of literature on problem-oriented policing. The POP Center provides access to articles on crime prevention and problem-oriented policing published through the Crime Prevention Studies series. Further, the POP Center itself has commissioned the production of a series of diverse guides focused on the problem-oriented approach. The Center produces 1) problem-specific guides, 2) response-specific guides, and 3) problem-solving tool guides. The three types of guides offer a broad spectrum of information about applying problem-oriented policing. These guides are intended to be based on actual problem-oriented efforts and are purposefully written for practitioners.

Also available from the POP Center's library are submissions to the annual Goldstein and Tilley Awards for Excellence in Problem-Solving. There are several hundred examples of problem-oriented policing projects available in each of the two award depositories. The Goldstein and Tilley Award submissions are the largest collection of files documenting attempts, both successful and unsuccessful, to employ problem-oriented policing.

Several award submission analyses have been conducted to assess the state of problem-oriented policing efforts throughout the world (Bullock et al., 2006; Clarke, 1997; Eck & Madensen, 2012; Rojek, 2003; Scott, 2000). Table 3 provides a brief overview of each of the analyses of award submissions. The nature of the reviews is typically limited to brief counts of specific characteristics of projects. For example, Rojek (2003) examined the problems that were

the focus of POP projects and then the group of responses that might be related to the problem definitions. Eck and Madensen (2012) took this work one step further, specifically focusing on whether or not projects incorporated situational crime prevention efforts in their responses. Many of the reviews focus on a small subset of projects, such as award finalists (typically four to ten projects per year) (Eck & Madensen, 2012; Scott, 2000) or only one or a few years worth of submissions (Clarke, 1997; Scott, 2000). None of the reviews have compared submissions to the two award programs.

Table 3: Summary of Excellence in Problem-Solving Award Reviews

Author, Year	Award	Time	Cases	N=	Notes
Clarke, 1997	Goldstein	1995	All	88	-general review of submissions for one year -30 of 88 projects are actually problem-oriented policing projects -problem scanning, analysis and assessment are weak -on average, projects use 5 different types of responses -use of situational responses is encouraging
Scott, 2000	Goldstein	1993-99	1993-95: Winners 1996-99: 1st Round Review	100	-review of strong submissions -police are willing to use the criminal justice system and alternative responses to problems -combinations of responses are used -problem analysis and assessment are weak -police executives and academic researchers are not paying enough attention to POP work
Rojek, 2003	Goldstein	1993-99	Finalists	53	-review of best submissions -most problems are multi-faceted and contextual - traditional and alternative responses are in use -CPTED, community mobilization, and targeted enforcement were the most popular responses -more research needed to determine if POP process is institutionalized in agencies
Bullock, Erol, & Tilley, 2006	Tilley	1999-2004	25 randomly selected per year	150	-random review of submissions -nearly all police agencies in England have participated in the Tilley Award program -analysis and assessment were limited -projects noted encountering a series of data and implementation problems -problems did not improve over the course of the review period

Author, Year	Award	Time	Cases	N=	Notes
Eck & Madensen, 2012	Goldstein	2001-10	Finalists	59	-review of best submissions for evidence of responses based on situational crime prevention -86% of projects included at least one situational response -winners and finalists were equally as likely to incorporate situational measures -56% of interventions were place-based, 26% offender-based, and 15% victim-based

Although the reviewers of these awards have examined the two sets of submissions separately and at different periods in time, the reviews have reached similar conclusions. The findings continuously suggest that although there is a rich collection of problem-oriented policing efforts, the majority of projects demonstrate weaknesses in analysis and assessment activities (Clarke, 1997; Scott, 2000; Bullock et al., 2006). Many of these projects represent what Braga and Weisburd (2006) call "shallow" problem-solving, rather than true problem-oriented policing. Further, both the lack of problem framing as well as frame misdiagnoses in these projects is particularly troubling as it leads to the use of responses that may not fit the true problem (Scott, 2000; Bullock et al., 2006).

Summary

The discussion in Chapters 3 and 4 demonstrates that there has been extensive research documenting the problem-oriented policing approach. There is also a wealth of literature available describing the varied uses for problem-oriented policing. However, evaluations of problem-oriented policing are limited and only find the process to be modestly successful (Weisburd et al., 2010). Why is this? As I have shown, there is only a small body of research examining the types of officers who are likely to engage in problem-oriented efforts. And, as I have noted there is no research examining the types of problem frames that officers used to guide

their work. Problem-oriented policing was introduced as a remedy to the means over ends syndrome in policing (Goldstein, 1979). However, it is still important to examine the means of problem-oriented policing, particularly when we are not sure if the process is working properly. In the case of problem-oriented policing, there are a number of examples where it has been suggested that the process of framing problems suffers from weaknesses (Bichler & Gaines, 2005; Goldstein, 1990; Scott, 2000). If problem-oriented policing is to live up to the potential that it has been credited as having, it is important to discern what is causing these weaknesses. In the next chapter, I will provide some examples of research on problem framing within the general policing literature. From this literature, we may begin to identify how we can better understand and investigate the problem framing process in problem-oriented policing.

Chapter 5 – Police Problem Framing in Action

As noted in Chapter 2, problem framing has been studied extensively in economics, psychology, sociology, and communications research. It has only received limited attention within policing research. And, as I discussed in the previous chapter, it has not been discussed in relation to problem-oriented policing, an area where the framing of a problem is pivotal for developing a useful response. In this chapter I will review research on problem framing in policing. This review will then serve as a basis for the development of research on problem framing within problem-oriented policing.

Within the general policing literature, the primary focus on problem framing has been the recognition of the use of heuristics, or thinking shortcuts, by police officers (Piliavin & Briar, 1964; Sealock & Simpson, 1998). A small body of research in policing has also highlighted the fact that different presentations of information may influence response (Bichler & Gaines, 2005; Graziano et al., 2013; Groff et al., 2005; Payne et al., 2013). The use of problem framing in problem-oriented policing is a largely unexplored area. Research that aims to better understand the relationship between problem framing and problem-solving in policing is sorely needed.

Problem Frames and Framing Effects in Policing

Problem framing concentrates on the variety of ways that one can interpret a problem based on personal experiences or shared theories to generate alternative choice options. Police problem frames are the various ways that a group of troublesome events can be explained by either personal heuristics or shared theoretical frames. In this section, I will review elements that can influence police problem frames, including factual knowledge, theoretical understandings of crime, and personal experiences. Finally, I will provide examples of the use of problem frames in policing, including framing traps in investigations, how frames influence the understanding of

problems, and different problem framing perspectives. This section will loosely follow the outline of general framing research presented in Chapter 2.

What are Problem Frames in Policing?

As I noted in Chapter 2, problem frames are general thought structures that allow us to organize shared theories and personal experiences to guide decision-making. In the same manner, police problem frames are influenced by our understanding of 1) general knowledge about why the problem occurs, such as theories of crime, and 2) personal knowledge and experiences related to similar problems or the elements contributing to the problem. The general theory adopted to explain why a police problem has developed will guide the development of a problem frame. The personal experiences and potential biases of officers investigating the problem can then push the overall development of the problem frame in one direction over another. The influences of personal experiences may be small or large, but can lead to conflicts among officers with differing experiences and perspectives.

When police officers approach problems and need to make quick decisions, they may call upon heuristics to guide their responses (Piliavin & Briar, 1964; Sealock & Simpson, 1998). Officers will use these perceptual shortcuts to integrate their previous experiences and knowledge with the current problems they are facing. As noted famously by Bittner, police officers have an "intuitive grasp of situational exigencies" (Bittner, 1970: 46). Police are often called on to make quick decisions where there is not time for careful analysis and deliberation. In these cases, they fall back on heuristics, including personal stereotypes, to frame the situation. Although the use of heuristics in policing is most often discussed in relation to dangerous situations, police officers may use heuristics in a variety of situations when they can tie an element or elements of the present case to previous cases. For example, in a very early study on

disproportionate minority contact by police officers, Piliavin and Briar (1964) reported that many police officers used both personal prejudices and prior work-related experiences with minority youth to influence their decision-making.

When the use of heuristics is tied to dangerous situations, they may be labeled as "sixth sense" or "gut instinct" responses that police officers are reputed to use with certain people and problems. In contrast to general shorthands or heuristics, the sixth sense of police officers is said to specifically warn the officer that danger is imminent (Worrall, 2013). This sense is exemplified by Skolnick's example of the symbolic assailant. Symbolic assailants are individuals who "use gesture, language, and attire that the policeman has come to recognize as a prelude to violence" (Skolnick, 1994: 44). The roots of heuristics, sixth senses, and gut instincts lie in training and socialization of officers as well as personal experiences (McNulty, 1994; Worrall, 2013).

Framing influences, including heuristic short-cuts and theoretical long-cuts, will moderate how officers view the world, and as a result, how they define problems and solutions. Just as police officers may recognize the set up for an offense before it occurs (e.g. recognizing the actions of a pick-pocket), police officers may also be able to look at a series of crimes and suggest potential contributing factors that the average person would not recognize. Although we recognize that police use heuristics to guide their decisions, we know very little about how variations in heuristics might influence problem framing and problem responses. The more we know about how officers frame problems, the better we will be able to train officers to consider alternatives outside their previous experiences or learnt traditional responses.

Managing Meanings in Policing

Police problems can be framed in a variety of ways. How police frame problems, or manage the meaning of the problem, will influence how they respond to the problem. Within the police problem framing literature there is discussion of different types of frames that might be applied to particular situations. Tracy (1997) reports on the impact of the different expectation frames of 911 callers and call takers. Callers approach the situation with a "customer service" frame, hoping that the call taker will immediately produce a response and relief. Emergency call takers, in contrast, have a "public service" framework, where they need to assess the content of the request to ensure that the proper services are provided. The difference in frames, what Tracy calls a "frame mismatch," can cause conflict between the expectations of the requester and the responder, when the other party fails to act as desired. The public service frame can also be seen as a street-level bureaucrat frame, where the call taker is interpreting the request to identify what public services may be available in response (Lipsky, 1980). Here, the call taker may be determining whether the caller needs medical, police, or fire assistance. If the caller needs other public assistance, the call taker may be able to refer the caller to another government program.

In addition to the contrasting frames of emergency callers and call takers, research has suggested that the problem frame put forth by emergency call takers and police dispatchers will influence how the police approach a crime scene and ultimately describe the problem (Antunes & Scott, 1981; Pepinsky, 1976). Pepinsky (1976) found that once a crime was described by a police dispatcher, police officers rarely deviated from that description of the incident in their incident reports. Specifically, in the majority of situations officers were unlikely to reclassify the offense or add additional offenses following their arrival at the scene. This finding highlights the

strong influence of the police dispatchers in the initial description of a problem on the response and handling of a crime.

Stalans and Finn (1995) discuss the differences in problem frames between officers who are new to policing and those who have years of experience. They suggest that when new officers are faced with a problem situation, such as a domestic violence call, they are more likely to use a normative frame. Under a normative frame, the officers assess blameworthiness to interpret the situation. In contrast, experienced officers are more likely to apply an efficiency frame that leads them to assess the dangerousness of the situation and the likelihood of a prosecution upon arrest. Which problem frame they use influences what their response is to the situation.

A recent piece by Payne and colleagues (2013) highlights how the selection of one problem frame over another can influence the police response. The researchers were presented with a problem from a local police department. The police claimed that residents using Section 8 vouchers (Housing Choice Vouchers) were causing an increase in calls for service in the community and wanted advice on how to respond to the issue. Upon a review of the data, however, the researchers identified that the community's increase in calls for service could also be linked to lax property management at a small number of apartment buildings. The police could do little to improve the socioeconomic status of residents in the community related to a "Section 8 problem." However, the police could work with landlords to improve property management. This example of reframing a problem demonstrates the value of alternative problem frames. While several different frames could be used to explain a problem, only a few may effectively contribute to the reduction of crime and disorder.

These are just a few examples of many of the differing sets of potential problem frames that may be involved in police activities. Citizens, the police, and even other government entities, such as the courts, city council, or government departments, may have different expectations of how a service should be provided or a law should be enforced ("No Love," 2010; C. Thomas, personal communication, February 7, 2012). It is a useful exercise for police problem framers to consider the alternative frames that might be employed when they approach a problem (Payne et al., 2013; Scott, 2000).

Framing Perspectives

Do officers who work in the same areas frame problems in the same way? Bichler and Gaines (2005) explored this question to see if officers who work the same beats identified and explained problems in the same way. When the pair asked a group of police officers to identify problem areas in their communities they found that the officers had differences of opinion about where the problem locations in the community were. Further, the places that the officers perceived as problems were not necessarily the most troublesome places in the community. The differences in problem selection between officers and when compared to data highlight the fact that framing challenges begin with the initial definition of a police problem.

Recognizing that police officers might frame problems differently, Graziano, Rosenbaum and Schuck (2013) examined efforts to see if the problem frames of officers could be altered to adopt a particular frame through new training and changes in support. In particular, the research examined efforts to incorporate community members in problem-solving exercises, to increase community ownership of problems. Overall, the research found that when challenged with new problems the police often reverted to their traditional responses. While they did begin to ask the community about problems, they often failed to listen to their comments or act upon their

concerns. Further, the community failed to require the police to do so. A combination of shifts in organizational priorities, general police culture, and a lack of training on how to work with the community limited the effectiveness of the effort.

Problem framing challenges have also been identified in relation to how data is presented. Groff and colleagues (2005) provide an example of how police information can be graphically framed in different ways to produce different responses from viewers. In this work the researchers measured how fear of crime levels among citizens changed with different depictions of the same police statistics. While the findings are focused on citizen perceptions, they are, however, instructional for general framing research. The researchers found that when crime data was presented in a tabular format, viewers had a higher level of concern about crime than when the same information was presented in two different types of maps. In this instance, the literal depiction of the crime problem caused the viewers to react to the problem in different ways. These findings reflect Bless and colleagues' (1998) research that found a difference in results if the Asian Disease Problem was framed as a statistical or medical problem. While our discussion of problem framing is usually metaphorical, the physical way in which facts are framed can also influence choices.

A second study examining framing effects and fear of crime in a different format had different results. Quinton (2011) examined whether the distribution of crime information in general increased levels of fear of crime. The research findings suggest that residents have a long-standing framework to explain crime in their community. Additional information about crime is added to their problem frame and cannot radically influence their feelings, similar to the adjustment and anchoring heuristic identified by Tversky and Kahneman (1974). Specifically, Quinton suggested that residents interpreted crime data in a way that reinforced their prior

framework. As a result, he found that it was unlikely for new information about crime in a community to radically alter fear of crime levels.

Cognitive Traps

Problem frames guide our decision-making. However, systematic errors in the development of frames can reduce the usefulness of a problem frame (Tversky & Kahneman, 1974). For example, a problem frame that is based on satisficing may not consider all of the potentially relevant information in a problem or capture the actual nature of a problem. If the goal of the problem-solving exercise is to reduce crime, then such a problem frame may not be helpful. In a text on the various sources of investigative failures, Rossmo (2009) identifies a series of framing traps that can be made in the investigative process. Although focused on investigations, Rossmo's discussion of these framing traps can be applied to other areas of police work. Rossmo notes three specific issues that may cause investigators to frame their investigations around the wrong elements: 1) cognitive biases, 2) organizational traps, and 3) probability errors. As Stubbins and Stubbins note in one chapter of the text, police investigators do not join an investigation with a completely empty mind. They have a variety of theories and previous experiences that shape their views of how the world works and thus, how crimes occur (Stubbins & Stubbins, 2009, p. 100). Because of the cognitive traps that investigators can fall into, many of the contributors to this text, like Goldstein (1990), encourage investigators to consider a variety of alternative frames to explain the crime problem. Such a practice reminds investigators that when they focus solely on one problem frame, that frame may cut off a part of the problem picture.

Problem Framing and Crime Science

Within criminological research, a new discipline has developed that seeks to integrate research from other fields into policing. This specialty is called crime science. Originally coined in the UK around the turn of the 21st century, crime science aims to incorporate methods of practice, theories, and research findings from other scientific fields into the study of disorder and crime (Laycock, 2005). This process incorporates findings from all forms of science, including the natural sciences, social sciences, and computer science to inform better processes of experimentation to reduce crime.

The concept behind crime science is not new. As I have noted, the problem-oriented approach is based on the scientific method. Goldstein (1979) also encouraged police researchers to examine other fields of research to better understand crime problems in his original article on problem-oriented policing. He noted that,

> [c]onsiderable knowledge about some of the problems with which the police struggle has been generated outside police agencies by criminologists, sociologists, psychologists, and psychiatrists. But… relatively few of these findings have influenced the formal policies and operating decisions of practitioners (Goldstein, 1979: 250).

Unfortunately, even after Goldstein's comment, the exploration of other fields for assistance in the problem-oriented approach has been somewhat limited.

The study of problem framing in policing is an example of the crime science approach. First, problems are at the heart of police work. Second, there is a very limited amount of research on the influence of problem framing in policing. As a result, it is both useful and efficient to attempt to integrate lessons from other social sciences into our work with problems in policing.

Summary

To date there has only been a limited exploration of how the process of problem framing can influence certain issues within policing. However, our knowledge of problem framing is not limited to policing. There are a number of lessons that we can pull from the greater research on problem framing to apply to problem framing in policing. In the next chapter, I outline my research for examining how police officers frame problems in problem-oriented policing. This work, coupled with the previous research on problem-oriented policing and problem framing presented in the past few chapters, will help us begin to develop a theory for how problem framing impacts problem-oriented policing. Ultimately, how the police approach problem framing could have major implications on the outcome of crime prevention initiatives and specifically problem-oriented policing projects. As I have noted, how a problem is framed will influence the responses that are selected. As we gain more information about this process we can identify ways to improve the overall quality of police problem-solving efforts through research and training.

Chapter 6 – Operationalizing Frames

Where does the previous work on problem framing, problem-oriented policing, and police problems lead? In this section I introduce research that will tie the background material together to help us examine how problems are framed in problem-oriented policing. This work is guided by the primary research question examining what problem frames are currently used in problem oriented policing. I also examine whether those frames can be linked to other frames, types of crimes, or presentations of information. The primary means for examining these questions is a content analysis of problem-oriented policing project submissions for the Goldstein and Tilley Awards for Excellence in Problem-Solving. To support this work, I also surveyed a small group of police officers who are engaged in problem-oriented policing projects to gain a sense of their problem-framing mindsets. This research allows us to establish a baseline for problem framing activities among officers and departments conducting problem-oriented policing projects, a previously unexplored research area. This work will help us to better understand the criminological and social frames which guide the work of the police in their problem-solving efforts.

The Current Research

The mixed methods research presented here aims to investigate how the police frame problem-oriented policing efforts. This research includes a content analysis of a collection of POP projects to identify what frames problem-solvers use in problem-oriented policing projects. The research also aims to tease out specific variables that might contribute to the framing of a problem in one way rather than another. This work is supplemented by a survey of police officers involved in problem-oriented policing.

Our limited knowledge about problem framing within problem-oriented policing encourages this initial research to be largely qualitative and exploratory in nature. Qualitative research allows us to "engage a broad view of causation that permits getting at the many forces in the world and human minds that together influence behavior" (Shaddish, Cook, & Campbell, 2002: 500). The exploratory nature of this research, however, warrants some concerns about validity. Following my discussion of each phase of research, I identify potential threats to validity that may temper the research findings. Once we better understand the characteristics that influence problem framing it may be possible to conduct more extensive quantitative testing of the framing process. At present that is not a viable option.

Research Questions and Problem Frames

The present research is guided by a series of questions about the problem framing activities of police officers involved in problem-oriented policing projects. In this section, I present the primary and secondary research questions. The following sections then describe the different research activities I have undertaken to answer the research questions. The primary research question is:

- What frames are used in problem-oriented policing?

In each section of the research I examine this question and then also seek to supplement my findings with more details about the problem framing activities of problem-oriented policing officers. In support of this effort, I also explore the following related questions:

- Are the frames used more likely to be traditional or alternative?
- Are there clusters of frames that appear together more often than others?
- Are certain frames used in response to certain types of crimes?
- Has the usage of frames changed over time? and
- How does the presentation of a problem influence the frames that are selected?

The first goal of the current research is to identify the problem frames that are used in problem-oriented policing. Problem-oriented policing encourages officers to incorporate theory, previous research findings, and creative problem-solving to address stubborn crime problems. The crime and disorder problems targeted by problem-oriented policing typically have been resistant to responses that strictly involve the traditional response frames. As a result, I would expect problem-oriented policing projects to incorporate a wide variety of the problem frames that were outlined by Goldstein (1990) in his discussion of alternative problem responses and outlined in Chapter 3.

To examine my primary research question, I identified the frames that are described in problem-oriented policing projects submitted to the Goldstein and Tilley Awards. Problem frames may be incorporated throughout the SARA process of a POP project. Frames may be introduced during the scanning and analysis phases, where they are used to define and describe a problem. In this work, I combine the frames that are used during the scanning and analysis phases to represent the "problem definition frames." Problem frames may also be used to guide the development of responses.

At any point in the framing process one or a number of frames may be used to define or describe the problem or guide the development of a problem response. In addition to asking what frames the police are using to define and respond to problems, this research also seeks to identify whether those frames are among the traditional problem frames or are part of the larger group of alternative frames. In this work, I have classified the three traditional problem frames as those that the police might have historically considered as a response to a crime problem, including: traditional policing and enforcement, crime prevention education and training for the community, and administrative responses (such as the development of task forces or the

reassignment of officers). Although Goldstein (1979; 1990) encouraged the increased use of alternative problem frames, he also understood the need to continue to use some traditional policing frames.

In connection with the primary research question I also explore whether certain frames cluster together. Many of the frame concepts are similar and use concepts and terminology that overlap. For example, CPTED and defensible space frames may be used in combination with situational crime prevention language. The processes related to target hardening through changes in the built environment will naturally be related to increasing the effort and risks of a potential offender. In this review, the concept of territoriality will be used to discern whether a change to the built environment is associated with defensible space. If there is no discussion of the idea of territoriality or increased ownership among residents, then the frame will be identified as crime prevention through environmental design. However, it may be difficult to disentangle whether a project that appears to be framed by situational crime prevention is not also framed as a CPTED or defensible space problem. If it is not possible to disentangle the intentions of the project team, then multiple frames may be documented for the project.

I then turn to the question of whether certain frames are more likely to be used with particular types of crimes, but not others. For example, do the majority of burglary projects in the sample involve a crime prevention through environmental design (CPTED) framework? It is likely that some crime types are framed in a similar manner. We do not necessarily have evidence that one frame might be more effective than another, but we may find that in certain situations, one frame is more likely to be used than another. Then, research conducted at a later date might be able to determine whether or not the frame that was described was useful for reducing crime. While such findings will not be possible from the proposed work, this research

helps to develop a path toward more conclusive research findings about how to shape problem frames that achieve specific goals.

The final questions that I consider are: does the usage of frames change over time or does the presentation of a problem influence the use of frames? Table 4 briefly identifies where in the research each of the previously identified questions are answered. Then, in the following sections I describe the specific activities I undertook to collect and examine data to answer the questions.

Table 4: Research Activities to Answer Research Questions

	Content Analysis	Survey
What frames are used?	X	X
Traditional or alternative frames?	X	X
Clusters of frames that work together?	X	X
Different frames for different crimes?	X	X
Usage of frames changes over time?	X	
Presentation of problem influences frames?		X

Research Activities - Content Analysis of Problem-Oriented Policing Projects

The first phase of the research is a content analysis of the problem frames and framing processes used by organizations that have submitted problem-solving projects to the annual Goldstein and Tilley Awards for excellence in problem-solving. I reviewed a collection of submissions to each of the award programs to gain a better understanding of the problem frames that are used in actual POP projects. This review examined how the selection of a problem frame could influence the selection of responses to the problem. Additionally, this review aimed

to determine whether certain frames were used to develop a response to specific projects or if groups of frames were found to cluster together.

Some commentators have suggested that too much analysis of problem-oriented policing has focused on the means over the ends of the process (Eck, 2003; Bullock, 2007; Goldstein, 1990). One of Goldstein's motivations for developing problem-oriented policing was to focus efforts on the ends of policing, the successful reduction of problems, rather than the means (Goldstein, 1979; Scott, 2000). These arguments might suggest that another review of the POP process would not be as useful as an examination of the results of problem-oriented work. However, many of these same commentators have also noted that problem-oriented policing is often not conducted as originally outlined (Goldstein, 1990; 2003; Scott, 2000; Scott & Clarke, 2000; Sidebottom & Tilley, 2011). As a result, there is merit to examining the POP process in an effort to lead to better implementation and better results.

The Goldstein Award was initially established in 1993 by the Police Executive Research Forum (PERF) to honor excellence in problem-solving (POPCenter.org, 2013). In 2003, the newly formed Center for Problem-Oriented Policing began working in conjunction with PERF to conduct this award program. From 2007 to 2013 the program was led by the POP Center, under the auspices of the U.S. Department of Justice, COPS office. Beginning in 2013, the Center for Problem Oriented Policing became the sole host of the program. Although based in the US, the Goldstein Award is an international award. Between 2000 and 2009, approximately 25% of Goldstein submissions were from non-American groups. The majority of the non-American submissions were from the United Kingdom. The remaining submissions were from Canada, Chile, the Netherlands, New Zealand, and Norway.

Submissions for the annual Goldstein Award are made through an open submission process. Following the end of the submission period, a judging panel reviews the submissions to determine if they meet the initial criteria for consideration for the award. Submissions are required to document their project work through the SARA model and are judged on both their process and results. The panel then identifies the cluster of projects with the highest group of scores, typically between five and ten projects (POPCenter.org, 2013). This group of finalists presents their work at the annual POP conference where they are judged by an official panel as well as by conference attendees. The highest scoring finalist is deemed the annual winner of the Goldstein Award (POPCenter.org, 2013).

The Tilley Award was established in 1999 to encourage problem-oriented policing efforts specifically within the United Kingdom (Bullock et al., 2006). As problem-oriented policing and partnerships became a national endeavor under the Crime Bill of 1998, the awards aimed to both encourage POP efforts as well as to highlight exemplary work. One of the rewards associated with winning the Tilley Award is the opportunity to be considered for the Goldstein Award and attend the POP Conference in the US (Bullock et al., 2006). The Tilley Award judging process is similar to the Goldstein Award. However, in recent years the Tilley Awards have been segmented into regional and thematic awards, thus honoring more projects every year. The Tilley Award program was not conducted in 2013.

The criteria for the Goldstein and Tilley Awards are very similar. The judging criteria for the 2013 Goldstein Award and the 2012 Tilley Award are attached at Appendices A and B, respectively. As I noted earlier, both awards recommend that submissions be organized by the SARA model. The SARA model (scan, analyze, respond, and assess) serves as a guide through the process of conducting a problem-oriented policing process (Eck & Spelman et al., 1987). In

recent years, the Tilley Award has also begun to recommend that project teams use the problem analysis triangle to guide their analysis work. As a result, more recent entries for the Tilley Award may organize their analysis by information about offenders, victims, and the places where crimes occur. Because the judging criteria has an influence on the potential for winning an award, these criteria may influence the problem frames that are used in projects, or, at the least, the problem framing language that is included in the project submission.

The collection of project submissions to both award programs is available from the Center for Problem-Oriented Policing website (http://www.popcenter.org/casestudies/). All submissions to the Goldstein Award from 1994 through 2011 are available to the public. Additionally, the six finalists for the 1993 award are also available. Since the inception of the Goldstein Award, over 1,000 projects have been submitted for consideration for the annual award. A collection of submissions for the Tilley Award is also available on the POP Center website. Over 800 submissions to this program from 1999 through 2009 are available. While there have been several reviews of the Goldstein and Tilley award submissions (Bullock et al., 2006; Clarke, 1997; Eck & Madensen, 2012; Rojek, 2003; Scott, 2000), none of those reviews has focused on identifying the problem frames that guide the development of problem responses. Additionally, none of the reviews have examined projects from both sets of award programs. My research examines the problem frames that are identified in a small subset of all of the project submissions for both award programs.

Over the next few pages, I define the attributes of the research sample. First, the review focuses on projects submitted from 2000 through 2009. This time range provides us with a ten year span of projects that were conducted in the recent past. Further, the time period was selected based on the public availability of submissions to both awards.

Second, this research aims to examine a collection of both good and average project submissions. Two groups of submissions were examined: finalists for each year (59 finalists for the Goldstein award and 39 finalists for the Tilley award) and then a random selection of 100 non-finalist cases for each award. This assortment of projects provides a greater level of variation in the sample than has been found in many previous evaluations of the award submissions. The finalists for each award will represent what are judged to be strong submissions for the award program. The 100 non-finalist cases from each program will then represent average submissions. Average submissions to the award programs should not be confused with average POP projects. The non-finalist projects were placed in chronological order from oldest to newest and then alphabetized by department and project name. Then, 100 cases from each award were selected by a systematic sampling process with a random start. This process ensures that each case in each set of awards during the designated period has an equal probability of being selected (versus each case within one calendar year having an equal chance of being selected). The goal of the research is to have a wide range of cases that are representative of the entire group of submissions, thus it is appropriate that years with more or less submissions have an equivalent presence in the sample of cases examined. By looking at multiple years, we are looking for overall content. During any one year, there were between 20 and 147 submissions to each of the award programs. Both award programs allowed departments to submit multiple projects each year.

Third, among the group of non-finalist submissions, only submissions provided by law enforcement agencies were considered. Since 2007, the Tilley Award has accepted submissions from both law enforcement and community organizations (Sidebottom & Tilley, 2011) while the Goldstein Award only allows submissions from law enforcement agencies. The British Crime

and Disorder Act of 1998 requires that police pursue partnerships with the community when responding to local problems. Thus, most British POP projects involve a local partner or partners who are also able to draft the award submission. As a result, the police agency does not bear the responsibility to develop the submission (Bullock et al., 2006; Sidebottom & Tilley, 2011). By removing the Tilley projects submitted by non-police agencies, I am making the two groups more similar for comparison purposes: each set of submissions has been prepared only by law enforcement agencies. Further, because the Tilley Award had over 50% more submissions than the Goldstein Award for the same period of time, I am not at risk of reducing the diversity of the sample. From 2007 through 2009 there were 34 Tilley projects that were submitted by community groups rather than police agencies (2007 = 6 of 82 total; 2008 = 24 of 143 total; 2009 = 4 of 9 total of regional and thematic submissions available).

Fourth, I eliminated obvious duplicate projects from the general samples. Some projects submitted to the Tilley Award were also submitted for consideration for the Goldstein Award during the same time period. To avoid duplication in the examination of submissions, projects that were submitted for both awards during the same year were only considered as Tilley Award submissions. Efforts were also undertaken to ensure that there are not duplicate projects in the sample that have been repackaged under different names (e.g. Operation Zeta submitted to the Tilley Award is the same project as the Z Street Burglary Reduction Project submitted to the Goldstein Award). I identified 45 projects from the same organizations, submitted under the same or a similar name to both the Goldstein and Tilley Awards between 2000 and 2009. These projects were only used in the Tilley sample.

The final submission criteria is that submissions that are identified, but do not have files available from the POP Center website are not be considered for the sample (12 Tilley Award files were not available).

To briefly summarize how the submissions representative of the "average" case will be selected: There are a total of 375 project submissions for the Goldstein Award for the designated time period that were submitted by law enforcement, were not finalists, and had files available from 2000 through 2009. To select 100 cases for systematic sampling with a random start from the Goldstein award submissions, I selected every 3.75 cases, beginning with a randomly selected whole start value between 1 and 3.75. The random start case number, as identified by a random number generator, was 2 and then every 3.75 submissions were included in the analysis (rounded to the nearest whole number). There were 663 submissions that met the review criteria for the Tilley Award during the 2000 through 2009 time period. The random start number was 6 and then every 6.63 submissions were included in the project. Table 5 identifies the distribution of the 100 selected projects by year for each of the awards and the count of finalists for each year. A complete list of the projects included in the review is available in Appendix C.

Table 5: Distribution of Cases by Year

Year	Goldstein Sample	Goldstein Finalists	Tilley Sample	Tilley Finalists
2000	7	6	7	4
2001	18	6	10	5
2002	14	6	9	8
2003	13	6	12	3
2004	4	5	14	3
2005	3	8	8	3
2006	11	4	10	3
2007	8	5	11	3
2008	12	7	18	3
2009	10	6	1	4
Total	100	59	100	39

This review of POP submissions examines the primary research question and then delves for more specific findings. These submissions are examined by conducting a content analysis of the 298 projects selected for review. The content analysis is based on the project descriptions that are provided by each team for the two awards. The examination seeks to quantify the number and type of problem frames that are used to define and respond to problems in the sample. Problem frames should guide responses. However, previous reviews of POP projects have found that even when alternative frames guide the problem identification and analysis phases, the response may revert to traditional police actions, such as patrol and arrest (Goldstein, 1979; Bichler & Gaines, 2005; Skogan et al., 1999).

A content analysis is an examination of written texts to identify the "presence and meaning of concepts, terms, or words in one or more pieces of recorded communication" (Stan, 2010). The reviewer can then make inferences from the categories of ideas or terms that are present or absent. The most simplistic form of content analysis is a search for frequently repeated words. During the present research I conducted a search for both concepts and key terminology that represent the potential frames that might be applied by a problem team. Each of the projects under review was coded for references to concepts, ideas, or actions that are representative of a specific type of problem frame. The concepts leading this analysis come from Goldstein's (1990) discussion of possible alternative responses. Table 6 below identifies some of the ideas that could be linked to the problem frames that I initially anticipated being used in problem-oriented policing projects, but the review will not be limited only to these terms. This is particularly important because police officers may be aware of a particular concept, but may not describe it in the precise terms used by academics describing the theories.

Table 6: Problem Frames Associated with Problem-Oriented Policing

Problem frame	Examples of associated key words or phrases
Situational crime prevention (Cornish & Clarke, 2003)	Increase risk Increase effort Reduce rewards Reduce provocations Remove excuses Opportunity reduction Tailor response to problem
Routine activities **Problem analysis triangle** (Cohen & Felson, 1979)	Offender/ Victim/ Place Convergence in time and space Handler/ Guardian/ Manager
Repeat victimization and repeat offending (Farrell & Pease, 1993)	Repeated crime Focus on small number of targets or offenders with highest percentage of all crime 80/20 rule Crime concentration
Hot spots policing (Sherman, Gartin, & Buerger, 1989)	Repeated crime at places 80/20 rule Crime concentration
Rational choice (Cornish & Clarke, 1987)	Calculating criminal Maximize utility Consistency in response Cost/ benefit analysis
Broken windows (Wilson & Kelling, 1982)	Small problems can lead to bigger problems if intervention does not occur Appearance of abandonment Order versus disorder Regulars versus strangers
Social control (community focused)	Collective efficacy Social control
Crime prevention through environmental design (CPTED) (Jeffery, 1971)	Changes in the built environment Increase feelings of safety Decrease opportunity Increase surveillance Limit access
Defensible space (Newman, 1972)	Design physical characteristics to increase territoriality Territoriality, Natural surveillance, Image, Milieu
Place management (Madensen & Eck, 2008)	Educate landlords/ managers about responsibilities Return property management tasks to property owners

Problem frame	Examples of associated key words or phrases
Risky facilities (Eck, Clarke, & Guerette, 2007)	Concentration of crime in similar facilities 80/20 rule
Pulling levers (Kennedy, 1997)	Focused deterrence Increased risks for specific criminal activities Call-ins Community incentives/disincentives for continued involvement
Pareto principle	80/20 rule A small number of people are responsible for a large proportion of events
Regulatory politics	Changes in ordinances or regulations
Crime prevention education/ training	Crime prevention training and educational materials (pamphlets, community meetings, etc.
Administrative/ organizational changes	Develop boards, committees, special teams, task forces Change training protocols or hiring practices

Prior to the full review, I conducted a brief analysis of approximately 30 submissions to the Goldstein Award to confirm that these problem frames and some of the related keywords were used within the text of submissions. The review confirmed the use of the frames identified in Table 6, but also identified the need to include four additional frames. First, it was necessary to include the traditional policing frame focused on enforcement efforts (increased patrols, arrests, and intensive supervision). The second additional frame involved diversion efforts focused on redirecting certain offenders from the criminal justice system into treatment or rehabilitation resources (offender treatment). These efforts, however, were not linked to more personal community incentives for desistance that might be related to a pulling levers framework. A related frame focusing on at-risk treatment was also identified in the initial review. This frame focused on providing services for both youth and adults who were either at-risk for offending or re-offending (but were not in current violation of the law). And finally, there was also evidence of a redevelopment frame. This frame was used when the police and/or

the community believed that an existing problem property could not be fixed, but needed to be torn down to make way for something new. These additional frames are identified in Table 7. A copy of the full and final list of potential problem frames and the coding sheet used for this research is attached at Appendix D.

Table 7: Additional Frames Associated with Problem-Oriented Policing

Problem frame	Examples of associated key words or phrases
Traditional Policing/ Enforcement	Arrest Intensive Supervision Targeted patrols
Offender Rehabilitation/ Treatment	Drug/ alcohol treatment services Education services Job training After-school programming
At-Risk Treatment/ Services	Services for individuals at-risk for offending or re-offending After-school programming Access to social services and career training Rehabilitation services
Redevelopment	Government or community based redevelopment of property

The problem frames identified in Tables 6 and 7 could be used individually or in combination with several other frames. Additionally, different problem frames could be highlighted at different points during a project. While one frame could be introduced during the scanning or analysis phase of a project, several different frames might be introduced during a discussion of the response. For this reason, I chose to collect data on the problem frames in two phases. First, I identified the problem frames that were introduced during the scanning and analysis phases as part of the problem definition. Then, I documented the frames that were introduced as part of the response. With this data I was then able to identify if traditional or alternative problem frames were used in project submissions. For the purposes of this research, traditional problem framing included three categories from the tables above: traditional policing/

enforcement, crime prevention education/ training, and administrative responses. All three of these categories are part of the traditional police response arsenal. The remainder of the frames are considered to be alternative problem frames. This data, separated into problem definition and response groups, then also allowed me to examine if the frames that guided the definition of the problem were linked to the frames that were used as part of the response.

The outlined process helped me to explore the research questions to determine 1) which frames are used in problem-oriented policing projects, 2) whether the frames used are alternative or traditional frames, 3) if certain frames are used for certain crimes, 4) if certain frames clustered together, or 5) if there was an evolution in framing activities over time. Further, the process was useful to identify more specific similarities and differences among the frames used by an international group of problem-solvers.

Limitations

Both phases of the research are qualitative in nature and, thus, have limited generalizability beyond the specific cases and individuals examined. However, in the first phase of research, the case selection process provides a wide cross-section of all of the cases submitted for the two awards. While previous research has only examined submissions to the Goldstein or the Tilley Award, here I review submissions to both programs. Additionally, several previous studies only examined the best submissions, those that were winners or finalists. In this work, I examine cases from the general pool of submission as well as those cases that were selected as finalists by a judging panel. Both of these elements expand the generalizability of the cases. Further, this research examines just under 300 submissions for the two awards programs. Previous reviews of submissions examined anywhere from 53 to 150 submissions for just one of the programs.

All submissions to the Goldstein and Tilley Awards are self-nominated and are likely to be representative of the best problem-solving efforts conducted by an agency. The self-nomination process creates a potential for bias where the applicants may filter the process and the results of their efforts in a positive light (Weisel, 2003). The retrospective drafting of a project submission may also result in the unintentional omission of some project elements, whether positive or negative (Rojek, 2003). While I am specifically examining how the projects used theoretical frames to guide their work, the project teams may not have documented all of the frames that were involved in their work. Thus, my findings are limited to what is reported in the submissions, not necessarily what was done in the projects. This limitation may also extend to my documentation of characteristics of the departments and officers involved in POP projects. I cannot verify that the person who wrote the submission was a part of the project team or was aware of all aspects of project work. Throughout this process, my findings are only as good as the documentation that is available in the submission files.

The sample projects may also be different from average POP projects due to the submission requirements and judging criteria. First, there is the potential that these submissions are framed in a different light than the typical POP project would be because they have been instructed to organize their work around the SARA process. Both the Goldstein and Tilley submission guidelines encourage project teams to follow the SARA model. Second, the Tilley submissions have also been encouraged to use the problem analysis triangle (and routine activities theory) in their projects. Finally, the judging criteria itself may cause the Goldstein and Tilley finalists groups to be substantively different from other projects due to the fact that they have been judged to meet a certain group of requirements. The judging process itself is a framing process (see Appendices A and B for the judging criteria for the two awards).

In addition to the judging process being a framing process, the content analysis is also a framing process. I, as the reviewer, am applying a subjective frame to my interpretation of the work conducted in each project. It is possible that a different reviewer of the data could arrive at different results. Although all efforts were made to ensure consistency in the review process, it is also possible that my judgment of the projects may have changed from the start to the end of the project.

A final limitation is due to the fact that while there is great variation in the projects that were undertaken, these submissions represent activities that each department believes had an impact on crime and disorder in the community. Further, it is likely that if the department has made the effort to draft a submission, then they believe that their efforts are worthy of recognition as a finalist or winner of the award (Weisburd et al., 2010; Rothstein, 2008). Although these submissions are representative of the average Tilley or Goldstein Award submission, they are not necessarily representative of typical problem-oriented policing efforts. However, because this area of research has not previously been explored, it is necessary to sacrifice external validity for the sake of learning more about the issue itself.

Research Activities – Survey Examination of How Police Officers Frame Problems

The content analysis of problem framing in problem-oriented policing projects is accompanied by a second phase of research that further explores the framing activities of police officers. This research involves surveying police officers who work on problem-oriented policing projects. The officers were asked to explore three vignettes about police problems and then answer a short list of demographic questions to provide more in-depth information about the frames that police officers use and the individual characteristics that might influence their frames. Both theory and research related to problem-oriented policing suggest that officers

engaged in POP projects should be more likely to introduce alternative framing to their work (Goldstein, 1979; 1990; Eck & Spelman et al., 1987; Cordner & Biebel, 2005). Whether this is due to training, department orientation, or personal differences is not known. While the first phase of research examined problem framing efforts in specific projects, this phase of research attempts to examine how a variety of police officers frame the same three general crime problems.

The review of the literature on officers engaged in problem-oriented policing activities suggests that even where POP is embraced department-wide there are some officers who desire to focus on problems and others who prefer to engage in traditional policing activities (e.g. individual incident response and patrol) (Cordner & Biebel, 2005; Dejong et al., 2001; Eck & Spelman et al., 1987). Further, previous research has suggested that officers who are older or who have a college degree may be less supportive of problem-solving work (Cordner & Biebel, 2005; Dejong et al., 2001). Based on this research, the second phase of my work examines if officers engaged in problem-oriented policing introduce alternative frames into their work.

Through training and department prioritization officers may learn about different types of problem frames and their related problem responses. These lessons should highlight the importance of alternative frames in problem-oriented policing. If officers engaged in problem-oriented policing are not using alternative frames, then the current training and management priorities are not effective and need to be revised. For these reasons, the vignettes presented in the survey will specifically test to see how officers in different departments with varying levels of training and use of POP respond to different types of problem situations, whether they revert to traditional responses, or whether they attempt to apply some of the new frames that have been introduced in the field.

Vignettes have been used in a wide variety of research projects to gain a better understanding about how individuals respond to different types of situations. Within policing, vignettes have been used to understand how different types of officers respond to certain situations, without having to observe the officers in that situation. Vignettes have been used to examine officers' use of discretion, including issues related to use of force and racial profiling, among other issues (Phillips, 2009; Son, Davis, & Rome, 1998). Stalans and Finn (1995) conducted research involving vignettes to learn more about differences in response to domestic violence calls between novices and experts. During a training period, officers were asked to review one of a possible eight vignettes describing a domestic violence situation and then discuss the situation. In each story the blameworthiness of the parties was unknown, but the injuries of the parties varied from one vignette to the next. The survey respondents were then asked to answer a series of questions to assess how officers with varying levels of policing experience and domestic violence training responded to the vignettes.

My primary population of interest is police officers who are involved with problem-oriented policing projects and who are knowledgeable of the process. This group includes the 154 police officer attendees of the 2013 Problem-Oriented Policing Conference who were identified in the Conference Attendee List (provided to all attendees at the conference). I sent each member of this group of officers an email invitation to participate in a survey. Approximately 29 respondents agreed to participate in the survey research (a response rate of 19%).

The survey process allowed me to attempt to survey a diverse population of police officers from across the country. In the past, researchers have studied the application of problem-oriented policing by examining individual police departments (Cordner & Biebel, 2005;

Eck & Spelman et al., 1987). However, research has demonstrated that police departments have largely been unable to implement problem-oriented policing department-wide (Knutsson, 2003). Problem-oriented policing is most likely to be conducted by a small number of officers within a department. Even in agencies that aspire to adopt POP department-wide, it is common to see only a small number of officers trained in the process at any one time (Webster & Connors, 1993). As a result, studying one or a few departments would only focus on a small number of officers with knowledge of POP. In contrast, by inviting a national population of POP officers to participate in the survey, from large and small departments throughout the country, I had a better chance of capturing a diverse population of officers with familiarity with problem-oriented policing.

Following recruitment into the study, officers were asked to visit the survey online. The survey asked the officers to review three vignettes, brief scenarios that purposefully may or may not prompt respondents toward certain responses, and provide their thoughts on each of the topics. The vignettes included a brief paragraph that introduced a problem that police might be called on to address. The first problem depicted a series of thefts from vehicles in parking lots in a downtown business district. The second problem outlined a large and diverse group of calls for service to a section of the community and included information on current knowledge about the offenders, victims, and location of the incidents. The third problem focused on a concern from elected officials about traffic accidents in the community. Following each of these vignettes, the respondents were asked to identify what they thought was occurring and what should be done about the problem. They were also informed that they should respond as if they were the lead officer in charge of responding to the problem and that their supervisor would support their decisions, in order to avoid any budgetary or supervisory concerns.

Respondents were then asked a brief series of questions about their department, themselves, and their experiences with problem-oriented policing. These questions included:

- How many officers are in your department (approximately)?
- What is your title/ rank?
- In which division or unit do you work?
- How long have you been in your current role?
- How long have you worked in law enforcement?
- What is your gender?
- What is the highest level of education that you completed?
- Have you ever attended a Problem-Oriented Policing conference? (with follow-up questions about attendance)
- Have you had any special training in problem-oriented policing? (with follow-up questions about trainings and amounts)
- Does your department consider problem-solving or problem-oriented policing a priority? Is knowledge of POP required for promotion?

A copy of the survey is attached at Appendix E.

The responses to the survey were examined in a manner similar to the examination of POP project submissions. The responses to each question were analyzed to determine if officers selected a particular problem frame or frames to describe what they thought was occurring in each vignette. The problem frames identified in Appendix D were also used in this portion of the research. Further, each of the vignettes was crafted to prompt or not prompt the respondents for particular responses. The first vignette is a stereotypical problem involving thefts from autos in parking facilities, similar to one explored by Clarke and Goldstein (2003) in Charlotte, NC. This scenario might suggest a routine activities frame; a CPTED frame focused on increasing surveillance and reducing access; or a situational crime prevention frame that highlights increasing effort and risk while reducing rewards. While the second vignette provides more details than the first, the crime problem itself is vague. By identifying information about the offender, victim, and location, some respondents might focus on using the crime triangle to explain the problem. The focus on the higher levels of calls for service in the area might suggest

a hot spots response. The nuisance issues might encourage some respondents to focus on a regulation-focused response or they might focus on broken windows. Other respondents might focus on changing management practices, applying situational crime prevention, or using prevention education in the area. The third vignette is the least detailed and least guided of the three. Respondents might apply any of the problem frames identified in Table 6.

Limitations

The second phase of research is equally as exploratory as the first. While the respondents are representative of a range of ranks and come from a wide variety of agencies both in the US and abroad, the findings of the research are only true at those particular agencies and for the particular individual surveyed and are not a portrayal of the field as a whole. The ultimate goals of the research are to learn more about an area that has previously not been explored and then to provide quantitative researchers with more background information for their analyses of the effectiveness of particular frameworks for police problem-solving.

Sampling bias is present and serves as both a positive and negative aspect of the work. My initial sampling group only includes attendees of the 2013 POP Conference. This group was selected for convenience based on the fact that I was able to obtain a list of attendees and that attendees to the conference are believed to have a general (and recent) interest in problem-oriented policing. However, the level of knowledge about problem-oriented policing of conference attendees may vary from first time attendees hoping to learn more about the process to frequent attendees who are presenting the results of their Goldstein finalist project at the conference. Demographic questions have been included in the survey in an effort to identify some of these differences among conference attendees. An additional concern related to the selection of the sample is that POP conference attendees are not the only individuals with

knowledge about problem-oriented policing. There are many individuals who did not attend the 2013 POP conference who have knowledge of the process. Further, the respondents to this survey are not all of the attendees to the 2013 conference, merely the ones whose contact information was available in the conference program and who voluntarily agreed to participate in the survey.

One last concern related to the use of POP conference attendees in the sample population is that the respondent's answers might be influenced by the knowledge that their involvement in the survey is related to their attendance at the conference (Stalans, 2012). This knowledge might cause them to think more about the problem scenarios or to think in a different way than they would have if they did not have a link between the conference and the survey (Iyengar, 1991). For these reasons, the results should be viewed only as what they are, voluntary survey responses from a portion of attendees to the 2013 Center for Problem-Oriented Policing conference and should not be viewed as representative of a greater population of police officers.

Finally, the review of the survey responses by this reviewer is equally as subjective as the content analysis review. It is possible that a different reviewer may find different results. While I undertook all possible efforts to ensure consistency and thoroughness in the review process, the review process remains subjective and open to human fallibility.

Summary

The research activities outlined in this chapter aim to answer the primary and secondary research questions about problem framing in problem-oriented policing, beginning with: What frames are used? Problem-oriented policing encourages officers to divert from traditional problem frames and to seek out alternative frames to respond to problems. If non-traditional problem frames are not being used, whether by themselves or in conjunction with traditional

frames, then the training processes for problem-oriented policing need to be revised. Previous research has suggested that the application of problem-oriented policing is weak (Goldstein, 1990; Scott, 2000). One of the keys to this disconnect may lie within the process of problem framing. Problem framing can have a great influence on the identification and use of responses to troublesome crime problems. My findings about the problem frames that are used and whether and how they cluster may influence our future discussions about how to undertake problem-oriented policing efforts.

Chapter 7 – Content Analysis: Traditional or Alternative Frames?

In this chapter, I present findings from the first phase of my research. The findings are linked to the primary research question, "What frames are used?" and several related questions. I seek to identify what types of frames officers are using in problem-oriented policing projects submitted for consideration for the Goldstein and Tilley Awards for Excellence in Problem-Solving. Previous research has found that when faced with new problems, officers may default to traditional responses (Bichler & Gaines, 2005; Graziano et al., 2013; Scott, 2000). My research supports this finding. However, the present research also shows that officers are likely to incorporate a mix of both traditional and alternative frames in their work. This chapter delves into some of the findings about the types of problem frames that officers use as well as the situations in which those frames are used.

Overview

The content analysis identifies the frames used in a sample of problem-oriented policing projects submitted for the Goldstein and Tilley Awards from 2000 through 2009. Table 8 summarizes the distribution of the cases in the sample by award segment (whether Goldstein or Tilley, Sample or Finalist), year, country of origin, and the general crime problem presented in each submission. There are two groups of cases that are reviewed for each type of award: 1) a sample of 100 cases from each award, and 2) finalists for each award during the review period. I will use the following labels to discuss each of these categories: the total sample (N=298), the Goldstein sample (N=100), the Tilley sample (N=100), the Goldstein finalists (N=59), and the Tilley finalists (N=39).

Table 8: Summary of Sample Cases (Percentage of N)

	Total N=298	Goldstein Sample N=100	Tilley Sample N=100	Goldstein Finalist N=59	Tilley Finalist N=39
Award Categories					
Goldstein					
Sample	33.6	100.0			
Finalists	19.8			100.0	
Tilley					
Sample	33.6		100.0		
Finalists	13.1				100.0
Year					
2000	8.4	7.0	7.0	10.2	12.8
2001	12.8	18.0	10.0	10.2	10.3
2002	12.4	14.0	9.0	10.2	20.5
2003	11.4	13.0	12.0	10.2	7.7
2004	8.7	4.0	14.0	8.5	7.7
2005	7.4	3.0	8.0	13.6	7.7
2006	9.7	11.0	10.0	6.8	10.3
2007	9.1	8.0	11.0	8.5	7.7
2008	13.4	12.0	18.0	11.9	7.7
2009	6.7	10.0	1.0	10.2	7.7
Country of Origin					
Canada	2.0	3.0	-	5.1	-
Chile	0.3	1.0	-	-	-
Netherlands	0.3	1.0	-	-	-
Norway	0.3	1.0	-	1.7	-
UK	56.7	10.0	100.0	33.9	100.0
US	40.3	85.0	-	59.3	-
General Crime Problem					
Disorder	**29.9**	**35.0**	**27.0**	**27.2**	**28.3**
Youth disorder/ violence	10.1	5.0	19.0	5.1	7.7
Graffiti/ vandalism	3.4	7.0	-	3.4	2.6
Drugs	3.4	5.0	-	6.8	2.6
Transients	3.0	6.0	-	1.7	5.1
Prostitution	2.4	3.0	2.0	3.4	-
Street racing/ sideshows	2.0	3.0	2.0	-	2.6
Missing people/ children	1.7	1.0	1.0	1.7	5.1
At-risk youth	1.7	3.0	1.0	1.7	-
Alcohol	1.7	2.0	2.0	-	2.6
Illegal cabs	0.7	-	-	3.4	-
Other	**28.9**	**29.0**	**36.0**	**17.0**	**28.3**
Administrative	10.4	12.0	14.0	-	12.8
Repeat offenders	4.7	1.0	11.0	3.4	-
Vehicular accidents	4.0	4.0	3.0	6.8	2.6
Other	2.4	3.0	2.0	1.7	2.6

	Total N=298	Goldstein Sample N=100	Tilley Sample N=100	Goldstein Finalist N=59	Tilley Finalist N=39
Vehicle arson/ dumping	1.3	1.0	2.0	-	2.6
Terrorism/ hate crimes	1.3	3.0	1.0	-	-
Guns	1.3	2.0	-	3.4	-
Fraud	1.3	3.0	1.0	-	-
Traffic	1.0	-	2.0	1.7	-
Fear	1.0	-	-	-	7.7
Place-Based	**23.5**	**24.0**	**19.0**	**33.9**	**18.0**
Hot spot	13.4	9.0	13.0	22.0	12.8
Problem neighborhood	8.7	14.0	6.0	8.5	2.6
Risky facilities	1.3	1.0	-	3.4	2.6
Property	**12.1**	**8.0**	**11.0**	**18.7**	**15.4**
Burglary	4.4	3.0	4.0	6.8	5.1
Theft from autos	3.7	-	5.0	5.1	7.7
Auto theft	2.4	4.0	1.0	3.4	-
Theft	1.7	1.0	1.0	3.4	2.6
Violent	**5.7**	**4.0**	**7.0**	**3.4**	**10.3**
Violent crime	2.0	-	3.0	-	7.7
Domestic violence	2.0	2.0	2.0	1.7	2.6
Robbery	1.7	2.0	2.0	1.7	-

The Goldstein and Tilley samples each represent approximately 34% of the sample, while the Goldstein and Tilley finalists represent 20% and 13% of the sample, respectively. The distribution of cases over the review period varies both within and among the four segments of the sample. The distribution of cases in the two sample groups is representative of the overall number of submissions to the award program in any one year (e.g. years with higher numbers of submissions are represented by a greater proportion of cases in the sample). The distribution of cases to the finalist groups is largely influenced by the judging committees for each award. The number of finalists for the Goldstein Award ranges from four to seven, while there are typically three or four finalists for the Tilley Award (POPCenter.org, 2013). One exception to this rule for the Tilley finalists was 2002, when there were eight finalists.

The cases in the sample come from six different countries: the United Kingdom, the United States, Canada, Chile, the Netherlands, and Norway. The Tilley Award is a British

award, thus cases from those segments are only from the United Kingdom. Although the Goldstein Award is an international competition, it is based in the United States. The bulk of the submissions for the Goldstein sample are from the US (85%). However, amongst the Goldstein finalists, 59% of the cases are from the US, 34% from the UK, 5% from Canada, and 2% from Norway.

The final section in Table 8 presents a summary of the types of crime problems that are addressed in the project submissions. I identified 29 different types of problems. These problems are also organized into more general groupings: violent or property crime, disorder, place-based incidents, or other. The types of problems that are most likely to be found among the total sample are disorder problems (30% of the sample), led by youth disorder cases (10% of the sample). The catch-all "other" category follows closely behind disorders, accounting for 29% of the total sample cases. This category includes a wide range of problems from vehicle arson to fraud to administrative issues, the most frequently occurring problem within the category. The place-based problem group only includes three different problem types, but accounts for 23% of all problems in the total sample. This group is led by hot spot problems, which is also the most commonly occurring problem among all 29 of the individual crime problem categories. Property (12%) and violent (6%) crimes are less likely to be the focus of the POP projects in the sample. Among the four segments of the sample, the Goldstein finalist group is most different from the total sample. For the Goldstein finalists, the most frequently occurring category is place-based problems (34%) and property crimes (19%) are examined more often than the crimes in the other category (17%). In the Tilley sample, the other category is the most commonly occurring group (36%).

Dealing with hot spots of crime, youth disorder and violence, and administrative POP issues are the most commonly addressed problems among all segments. Among the total sample, crime hot spots are the most common problem to be addressed by POP project teams (13% of the total sample). Hot spot problems are also the most common problem faced by both Goldstein finalists (22%) and Tilley finalists (13%). Administrative POP projects (e.g. institutionalizing POP in a department) are also a common project addressed by the Tilley finalists (13%). Problem neighborhoods, a problem similar to hot spots, are the most common problem in the Goldstein sample (14%). The most common Tilley sample crime problem is dealing with youth disorder and violence (19%). Each of the remaining crime problems is addressed in this sample of POP projects far less frequently, often only a few times within each of the sample groups.

A Special Set of Cases: "Not a Problem" Problems

Within the sample of submissions is a special class of cases. These cases have been self-identified by project teams as problems that should be the focus of a problem-oriented policing response, but are, in fact, not police problems per Goldstein's (1990) definition. Within the sample these types of cases include projects to improve police-community relations, efforts to develop task forces to improve general regional responses to unknown future problems, and programs to deter youth from entering into crime (without any crime problem or special population of youth being targeted). The identification of cases that are not actually problems is not a new finding. In his review of the 1995 Goldstein Award submissions, Clarke (1997) reported that 25 of the 89 cases that he reviewed were not police problems.

I identified 32 submissions in the sample (11% of the total sample) that are not police problems: fifteen from the Goldstein sample, twelve from the Tilley sample, and five from the Tilley finalist group. The five cases from the Tilley finalist group are all from the first few years

of the review period. In contrast, the cases that do not focus on problems in the general samples come from the entire review period. The majority of the "not a problem" cases have been classified as Administrative issues in Table 8. Of the 31 Administration problems noted in Table 8, 28 are from the "not a problem" group.

Because the sample of cases is focused on submissions to the two award programs and not fidelity to the POP idea, these cases remain in the sample. However, I do note when their presence in the sample might interfere with the overall results. It can be assumed that any references to the Administration crime classification category will primarily be referencing cases that are not focused on true police problems.

What Frames are Used?

The primary research question aims to identify what frames police officers use when they approach problems. Specifically, this question seeks to determine whether officers use traditional frames, alternative frames, or a mix of the two. Previous research suggests that even when trained to explore alternative frames, some officers favor the frames they are most familiar with, the traditional frames (Bichler & Gaines, 2005; Graziano et al., 2013; Scott, 2000). The use of traditional frames is particularly likely when officers are faced with new, challenging problems or need to make a quick decision (Graziano et al., 2013).

For ease of discussion, this section is divided into three parts. The first part focuses on framing during the scanning and analysis phases, when the problem is defined and described. The second part focuses on the response frames. In the final part, I bring the first two sections together to determine if the problem definition frames are linked to the problem response frames. In each section, I first provide a brief summary of the findings and then present the data that supports these findings.

Prior to reviewing the data, it is important to remind the reader that more than one frame can be used to define problems and guide responses. Each case is not limited to just one frame. For any one case there may be several frames that describe the problem and its response or there may have been no frames introduced by the project team. For example, a case may have two frames introduced during the scanning and analysis phase and five frames introduced during the response. Additionally, many of the potential frames have overlapping concepts which may be difficult to disentangle. During a discussion of a response, a project team might report that they conducted target hardening activities. Such activities might be representative of crime prevention through environmental design, defensible space, or situational crime prevention. If it is possible to identify that the particular activities are associated with just one of these frames, I do so (e.g. target hardening activities were connected with efforts to increase territoriality within the neighborhood suggesting defensible space activities). However, some cases might not be as clear or may suggest that activities are undertaken that involved two or more of the concepts. In such cases, multiple similar frames would be included in the counts.

Scanning and Analysis Frames

Summary:

- **What [scanning and analysis] frames are used?**
  - Alternative frames are primarily used in the scanning and analysis phase.
    - The most frequently used frames are routine activities theory, hot spots of crime, and broken windows.
  - However, in a large number of cases no frames are used to define the problems.
    - 38% of the total sample appears to be unframed.

Table 9 identifies the frames documented in the combined scanning and analysis (S/A) phases of the project submissions for the overall sample. The results found in the "Total Sample" column are discussed first and then I identify some of the highlights from the individual segments of the sample.

The total sample data in Table 9 presents both the percent and counts of the frames that are introduced during scanning and analysis for all of the cases in the sample. A wide variety of alternative frames are introduced during the scanning and analysis phases of problem-oriented policing projects for the total sample. However, approximately 38% of the total sample (114 of 298 cases) did not have any particular frame guiding the problem definition and analysis. In a case where the scanning and analysis phases lacked any particular problem frame, the project team would typically present counts of the crimes targeted and a brief and/or vague discussion of a need for a police response to the problem. When I examine the countries of origin of the projects that have no framing activity during the scanning and analysis phase, approximately 52% of the projects are from the US, 44% are from the UK, and 4% are from Canada (compared to 57% of the total sample from the US, 40% from the UK, and 2% from Canada).

Table 9: Scanning/ Analysis Frames by Sample Segments (Percentage of Samples)

	Total Sample N=298 Percent	N	Goldstein Sample N=100	Tilley Sample N=100	Goldstein Finalist N=59	Tilley Finalist N=39
Scanning/ Analysis						
Routine Activities/ PAT	29.9	89	7.0	36.0	44.1	51.3
Hot Spots	23.8	71	11.0	31.0	35.6	20.5
Broken Windows	14.4	43	18.0	11.0	15.3	12.8
Pareto (80/20)	7.7	23	3.0	10.0	8.5	12.8
CPTED	5.4	16	1.0	6.0	13.6	2.6
Repeat Victimization	3.7	11	1.0	4.0	5.1	7.7
Place Management	3.7	11	-	1.0	17.0	-
Risky Facilities	2.7	8	6.0	-	1.7	2.6
Social Control	1.0	3	2.0	-	1.7	-
Situational Crime Prev	1.0	3	-	1.0	3.4	-
At Risk Treatment	0.7	2	1.0	1.0	-	-
Crime Prevention/ Ed	0.3	1	-	-	1.7	-
Administrative	0.3	1	1.0	-	-	-
Regulation	0.3	1	-	-	1.7	-
No Scan/Analysis Frames	38.3	114	58.0	35.0	16.9	28.2
Avg. Number of S/A Frames per Case (if frames present)	1.5 (N=184)		1.2 (N=42)	1.6 (N=65)	1.8 (N=49)	1.5 (N=28)

Routine activities theory (and the problem analysis triangle) (N=89) and hot spots (N=71) frames account for over half of the scanning and analysis frames that are used in the total sample. The use of routine activities theory should be highlighted, however, because submissions to the Tilley Award are encouraged to use the problem analysis triangle to guide their analysis efforts (UK Home Office, 2013). This frame is found in 89 cases in the total sample, 78 of which are British. Broken windows (N=43) is also a commonly used frame among the total sample. During the scanning and analysis phases, the project teams use alternative frames, primarily theories of environmental criminology, to describe the crime problems that they believe are plaguing their communities. In only two cases are traditional frames (crime prevention, traditional policing/ enforcement, or administration) introduced to define or describe problems.

We next turn to the results from each of the four segments of the sample. From the individual segments we learn that the Goldstein and Tilley sample cases are the cases most likely to not have S/A frames. Within the Goldstein sample, 58% of the cases have no scanning or analysis frames, while this occurs less frequently in the Tilley sample (35%). Among the Goldstein finalists, this figure drops to 17%, while the Tilley finalist figure is 28%. This data strongly suggests that there are important differences between cases selected as finalist and those in the general sample. Cases selected as finalists, especially for the Goldstein award, are much more likely to be framed than cases in the general samples. Whether this is specifically due to the preferences of judges or another factor is unknown.

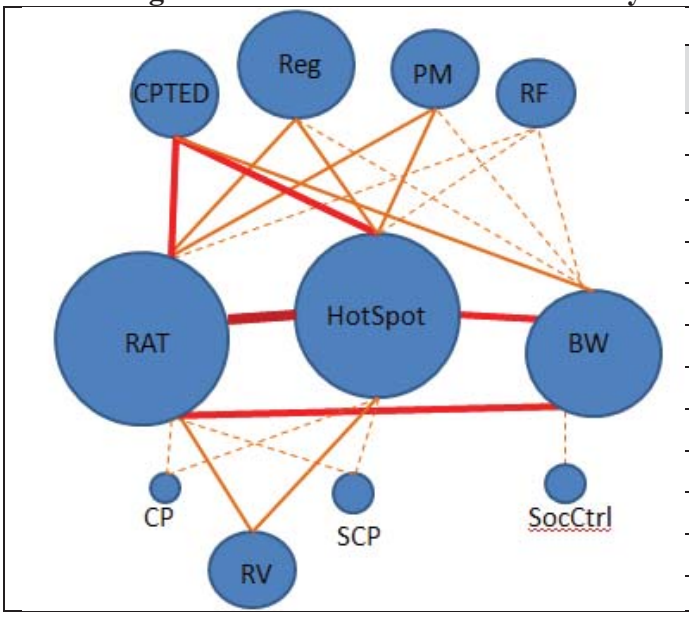
The most frequently used scanning and analysis frames among the sample and finalist segments are similar to those noted for the total sample. Routine activities theory is the most frequently used frame for the Tilley sample (36%), the Goldstein finalists (44%), and the Tilley finalists (51%). This frame was only used a handful of times by the Goldstein sample (7%). While it is not surprising that the Tilley sample and finalists would incorporate a routine activities frame, it is somewhat surprising that such a high percentage of Goldstein finalists used this frame. However, upon examining the data further, I discovered that 62% of the Goldstein finalists that used this frame were from the UK. The hot spots frame was also among the two most frequently used S/A frames for each segment of the sample. This frame varied in use from 36% of all S/A frames among the Goldstein finalist to 11% of the Goldstein sample group.

Finally, in Table 9, I report the average number of frames that are reported in each case. This value represents the average number of frames introduced in a project, when frames are used. It does not include the cases where there were no scanning or analysis frames used in a section. The average number of frames referenced per case in the total sample for scanning and

analysis is 1.5, with the individual segments ranging from 1.2 to 1.8 frames per case. Interestingly, while there were more scanning/analysis frames used by the Goldstein finalists (1.8) than the Goldstein sample (1.2), the average number of frames used by the Tilley finalists (1.5) was similar to the Tilley sample group (1.6).

Because the data suggests that, on average, more than one frame is used by project teams, I also examined whether certain frames cluster together. In Table 9, we saw that the most commonly used S/A frames were routine activities, hot spots of crime, and broken windows. In Figure 4, I show the connections between these three frames and other S/A frames. The table on the right shows how frequently each of the other frames is paired with the three most common frames. Empty cells in the table have no links. The strength of the links between the frames in the network on the left are depicted by darkness of color and the weight of the linking lines (thick, dark red lines identify more connections than thin, dashed orange lines). The table on the right serves as a key for the strength of the links. The size of the circle for the frame is based on how frequently that frame occurs in the total sample.

Figure 4: Network of Most Commonly Occurring Scanning/Analysis Frames



Frame	RAT	Hot Spots	BW	Ct in Total
RoutineAct	--			89
HotSpots	34	--		71
BrokenWind	16	8	--	43
Regulation	6	5	1	23
CPTED	10	8	3	16
RepeatVic	4	4		11
PlaceMgmt	4	4	1	11
RiskyFac	1	2	1	8
SituationalCP	2	1		3
SocialCtrl			1	3
CrimePrevtn	1	1		1

In Figure 4, we see that if a case that is framed with a routine activities S/A frame has a second S/A frame, then that frame is most likely to be one of the other two most commonly used frames: hot spots or broken windows. These three most commonly used S/A frames are less frequently paired with eight other S/A frames. The three primary frames are all linked to regulatory, CPTED, place management, and risky facilities frames. Of the three primary S/A frames, broken windows is the least likely to be paired with one of the other S/A frames. Broken windows is the only frame to also be linked with a social control frame. In contrast, repeat victimization, situational crime prevention, and traditional crime prevention are connected to routine activities and hot spots, but not broken windows. It is important to remember that the connections shown in the network on the left are the connections for the three most commonly used S/A frames. What the network image and the table do not show is that there are connections among the other frames. For example, among the sample cases, problems have been framed in terms of both risky facilities and regulation in five cases.

Response Frames

Summary:

- **What [response] frames are used?**
  - Traditional frames are primarily used in the response phase.
    - Traditional policing/ enforcement, crime prevention, and administrative response frames are most likely to be used.
    - These are followed by a wide range of alternative frames. The most frequently used alternative frames are CPTED, at-risk treatment, and situational crime prevention.

In Table 10, I identify the frames that are used during the response phase of the project submissions. Following the table, I review the findings for the total sample and then look at differences that might appear among the four segments. While the scanning and analysis phases

of the sample submissions are dominated by alternative frames, traditional frames are dominant in the response phase of these projects. In this work there are three frames that are included under the label "traditional" frames. This group includes: traditional policing/ enforcement, crime prevention education and training, and administrative responses. Approximately 90% of the cases in the total sample use at least one traditional response frame (N=267). In 23% of cases, only the traditional response frames are used (one, two, or all three of the traditional frames). All three of the traditional response frames are used together in 11% of cases in the sample. And, individually, the three frames are the most commonly used response frames, with crime prevention/ community education (61%) being most popular, followed by traditional policing/ enforcement (58%) and administrative changes (30%). It should be noted here, however, that of the 92 cases using an administration frame, 19 are cases that have been identified as "not a problem" problems. If these cases had been removed from the sample, there would only be 73 cases with an administration response frame, dropping this traditional crime category two places in the list in Table 10.

Table 10: Response Frames by Sample Segments (Percentage of Samples)

	Total Sample N=298 Percent	N	Goldstein Sample N=100	Tilley Sample N=100	Goldstein Finalist N=59	Tilley Finalist N=39
Response						
Crime Prevention/ Ed	61.1	182	51.0	70.0	61.0	64.1
Traditional Policing/ Enf	58.4	174	54.0	56.0	62.7	69.2
Administration	30.2	90	39.0	30.0	13.6	33.3
CPTED	26.2	78	11.0	25.0	49.2	33.3
At Risk Treatment	25.5	76	20.0	34.0	16.9	30.8
Situational Crime Prev	21.5	64	10.0	19.0	33.9	38.5
Regulation	15.4	46	17.0	12.0	22.0	10.3
Hot Spots	13.1	39	4.0	17.0	18.6	17.9
Place Management	12.1	36	8.0	9.0	30.5	2.6
Offender Treatment	10.4	31	12.0	11.0	11.9	2.6
Routine Activities/ PAT	7.7	23	3.0	4.0	13.6	20.5
Broken Windows	6.4	19	8.0	4.0	10.2	2.6
Social Control	6.4	19	10.0	2.0	10.2	2.6
Repeat Victimization	4.0	12	1.0	4.0	6.8	7.7
Pareto (80/20)	3.4	10	2.0	5.0	3.4	2.6
Redevelopment	3.4	10	7.0	1.0	3.4	-
Pulling Levers	1.3	4	1.0	-	5.1	-
Other	0.7	2	-	2.0	-	-
Defensible Space	0.3	1	-	-	1.7	-
Risky Facilities	0.3	1	1.0	-	-	-
No Response Frames	-	-	-	-	-	-
Avg. Number of Response Frames per Case	3.1	3.1	2.6	3.1	3.8	3.4

Following the traditional response frames in usage are a variety of alternative response frames. The most commonly used alternative response frames are CPTED (26% of cases), at-risk treatment (26%), and situational crime prevention (21%). These results support the previous research that suggests that the police may fall back on the known, traditional responses when they are unsure how to handle new problems (Bichler & Gaines, 2005; Graziano et al., 2013; Scott, 2000).

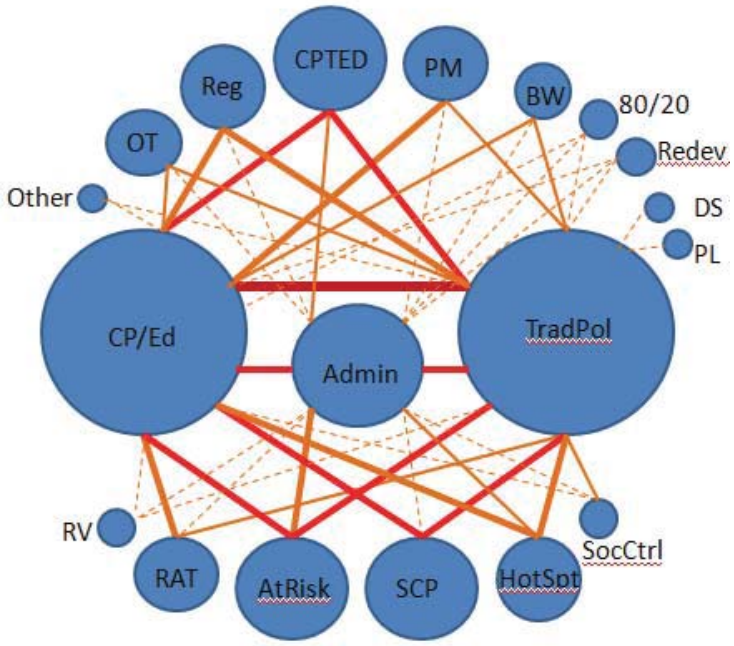
When we look to the individual segments of the sample, the traditional response frames continue to dominate the lists. However, the administrative response frame is not consistently as strong as the other two traditional frames for the Tilley sample, Goldstein finalists, and Tilley finalists. Within the Goldstein finalists group, specifically, the administrative frame is only used in 13% of cases, while CPTED, situational crime prevention, and place management frames are all used in more than 30% of the cases.

The average number of frames that are used per case in the response section of the total sample is 3.1. Additionally, there are no cases where the response lacks a frame. The Goldstein finalist group uses the most frames with 3.8 frames per case, while the Goldstein sample group has the lowest frames per case average (2.6 frames). Both of the finalist groups have a higher average number of response frames than the sample groups. It is interesting to note that while the finalist segments had a higher average number of response frames than the samples, the Tilley cases, and the Tilley finalists in particular, used a smaller collection of response frames than the Goldstein cases.

It is clear that the response frames in the sample are much more likely to be used in groups than by themselves. In Figure 5, we see the connections between the three most frequently used response frames (the traditional frames) and the other response frames (alternative frames). Similar to the scanning and analysis frame network, these three frames are most likely to cluster with each other. The three most frequently used alternative response frames are CPTED, at-risk treatment, and situational crime prevention. These three alternative response frames are also the three frames that are most likely to be associated with the crime prevention and traditional policing/ enforcement response frames. These three alternative response frames are also commonly found with administrative frames, although the hot spots

frame is the third most common alternative frame to be used with administrative frames. Almost all of the alternative frames are linked to all three of the primary response frames. This is in contrast to the S/A network in Figure 4, where there were more defined clusters of connections. Once again, the cell coloring in the table on the right serves as a key for the links on the left.

Figure 5: Network of Most Commonly Occurring Response Frames



	CP	Trad	Adm	Total
CrimePrevtn	--			182
TradtnlPol	118	--		174
Admin	49	49	--	90
CPTED	55	58	17	78
AtRisk	41	47	21	76
SituatnlCP	47	44	9	64
Regulation	27	35	9	46
HotSpots	30	27	15	39
PlaceMgmt	25	19	8	36
OffndrTrt	14	19	4	31
RoutineAct	21	18	2	23
BrokenWind	12	16	3	19
SocialCtrl	7	12	6	19
RepeatVic	9	8	2	12
80/20	6	8	5	10
Redvlpmt	2	8	1	10
PullingLev		2		4
Other	1	1		2
DefnsbleSp		1		1

Scanning/ Analysis to Response

Summary:

- **What frames are used [from scanning and analysis to response]?**
  - Descriptive frames are more likely to be used during scanning and analysis and prescriptive frames are more likely to be used during response activities.
  - Problem definition frames guide response frames, but in an indirect manner.

Previous research consistently suggests that how a problem is defined will influence the response (Allison, 1969; 1971; Fagley & Miller, 1990; Kahneman, 2011; Robertson, 2001;

Scheufele, 1999; Tversky & Kahneman, 1981; 1986). In the next set of tables and figures, I begin to examine how the frames used during the scanning and analysis phases relate to the responses. There are two ways to demonstrate that the problem definition guides the response. The first looks at whether the same frames are used in both phases, while the second considers whether certain S/A frames are regularly linked with other response frames. In the first instance, we would expect the frames used during the scanning and analysis phases of research to also be used as a response frame. In the second option, some S/A frames may be consistently linked with certain response frames due to a relationship between the definition and response frames. In the table and figures that follow I will examine both of these options.

To study the first option, I examined how often the same frame was used in the scanning and analysis phase as well as the response phase of a project in the total sample. This work combines data from Tables 9 and 10. The results are shown in Table 11. When we look at the total sample columns, we see that in 87 cases in the total sample (29%) a frame that was introduced in the scanning and analysis portions of a project was also used to guide the development of some sort of a response. When we only consider the cases that have S/A frames (184 cases), then 47% of the cases use the same frames in the scanning and analysis phases as in the response phase. Either way that we measure the value, in the majority of cases the frame or frames that are presented in the scanning and analysis phase of the work are not re-introduced in the response phase.

Table 11: Frames used during both Scanning/Analysis and Response (Percent of Segment)

Frame	Total Sample N=298 Percent	N	Goldstein Sample N=100	Tilley Sample N=100	Goldstein Finalists N=59	Tilley Finalists N=39
Hot Spots	9.1	27	2.0	12.0	13.6	12.8
Routine Activities	7.1	21	3.0	4.0	11.9	18.0
Broken Windows	5.0	15	6.0	3.0	8.5	2.6
CPTED	5.0	15	1.0	6.0	11.9	2.6
Place Management	2.7	8	-	1.0	11.9	-
Repeat Victimization	2.7	8	1.0	2.0	3.4	7.7
80/20	2.0	6	2.0	3.0	1.7	-
At-Risk Treatment	0.7	2	1.0	1.0	-	-
Social Control	0.7	2	1.0	-	1.7	-
Administrative	0.3	1	1.0	-	-	-
Crime Prevention	0.3	1	-	-	1.7	-
Regulation	0.3	1	-	-	1.7	-
Risky Facilities	0.3	1	1.0	-	-	2.6
Situational Crime Prevention	0.3	1	-	-	1.7	-
Total	29.2	87	18.0	26.0	50.9	33.3

The frames that are most likely to guide work in both portions of a project are hot spots (9% of cases), routine activities (7%), broken windows (5%), and CPTED (5%). Among the individual segments, hot spots is most frequently used in both phases for the Tilley sample (12%) and the Goldstein finalists (14%), while routine activities is commonly used during both phases for the Tilley finalists (18%). Frames that are used in the problem definition are more likely to be repeated in the response for the finalists than for the sample segments. Overall, however, the evidence suggests that the first option for explaining how a problem definition could guide the response is not strongly supported by the data: the selection of a frame during the scanning and analysis phase of the work is unlikely to lead to the use of that same frame in the response phase.

In Table 12 and the figures that follow I examine the second way in which scanning and analysis frames can be linked to response frames. In this section of the work we consider whether certain scanning and analysis frames might have a particular relationship with other

frames in the response. As I noted earlier, many of the frames that are prominent during the scanning and analysis process appear to be more useful to describe problems or organize information. These frames include routine activities, hot spots policing, and broken windows. Table 12 introduces the five most commonly used scanning and analysis frames in the rows and then the response frames that are used with them in the columns. The number of times that these frames are used together is indicated in the cells. The cell shading indicates the frames that are more likely to be used together (with red indicating highest frequency and the colors lightening to white to indicate the lowest frequencies). The empty cells represent frames that are not used.

Table 12: Most Frequently Occurring Scanning and Analysis Frames→ Response Frames

	Response Frames																				
S/A Frames	Total	CrimePrev	TradtnlPol	CPTED	SituatnlCP	AtRisk	RoutineAct	HotSpots	Admin	OffTrtmnt	PlaceMgmt	Regulation	BrokenWin	Repeat Vic	SocialCtrl	80/20	RedevIp	DefSpace	PullingLev	RiskyFac	Other
RAT	89	69	63	33	33	25	21	19	14	14	11	10	7	7	3	2	2	1	1		1
HS	71	47	51	29	20	19	9	27	12	7	13	9	4	5	3	6	2	1	1		
BW	43	27	37	17	11	16	7	5	12	5	6	10	15	1	8	1	4			1	
80/20	23	11	14	3	4	6	2	4	6	6	2	1	1	1		6			1		
CPTED	16	11	8	15	3	5	4	2	2	2	3	1	2				1				

For the five most frequently occurring S/A frames, crime prevention education and traditional policing/ enforcement are among the most frequently used frames. Among the five S/A frames, CPTED is the only frame where a traditional response frame is not the most common. In this instance, CPTED S/A frames lead to CPTED response frames most frequently (see Figure 10). When we look at the alternative response frames that are used for each S/A frame it is clear that some alternative frames are more likely to be used than others. The relationships between each of these five S/A frames and their unique groups of response frames are depicted individually in Appendix F.

The most commonly used S/A frames are useful for describing problems. However, with the exception of CPTED, they do not provide direct instructions for action in a response. The most frequently used response frames are action-oriented. In fact, they are either traditional responses that police officers might be most comfortable performing (enforcement and crime prevention) or they are alternative responses that prescribe specific actions in the response (such as CPTED, situational crime prevention, or at-risk treatment). These results suggest that certain frames are more useful as descriptions of problems, while others act as prescriptions for responses. While these findings do not provide conclusive support for the second option for linking problem definition and response frames discussed above, they do encourage further exploration of that option.

Are Different Frames Clustered Around Specific Crimes?

Summary:

- **Are different frames clustered around specific crimes?**
  - Some crimes are more likely to be defined and responded to by a small number of frames while other crime problems invite the consideration of a wider array of frames.
    - Place-based and property crimes in particular are most likely to be defined by an extensive array of both S/A and response frames.

To follow-up on the primary research question findings, I also seek to examine whether certain types of crimes influence the use of particular frames or groups of frames. For example, if there is a burglary problem in a neighborhood, do officers tend to define the problem as a repeat victims problem, a hot spots problem, a defensible space problem or a combination of all three? If specific frames or small clusters of frames are linked to certain categories of crimes, it may be useful to examine why this occurs and if the applied frames regularly contribute to successful reductions in crimes.

In this phase of research, I used the crime categories identified in Table 8 and identified the frames that are used with each crime type. Table 13 identifies the scanning and analysis frames that are matched with particular crime categories. Approximately 38% of the cases did not use a particular scanning or analysis frame to guide the definition and description of the problem. As I noted earlier, routine activities is the most commonly used S/A frame. Routine activities is a particularly popular frame among place-based and property crimes. Cases involving thefts from autos and youth disorder and violence are also frequently linked to a routine activities frame during the scanning and analysis period. While routine activities theory is a popular S/A frame among many crime categories, it is not the most frequently used frame for every crime category. For example, repeat offenders are most likely to be framed with the 80/20 rule, problem neighborhoods are most frequently linked to a broken windows frame, and burglary incidents are most frequently linked to a hot spots frame. The administrative concerns category serves as a special case. Most of the cases within this group are focused on developing administrative protocols for responding to problems or developing problem task forces, thus the typical S/A frames do not apply. The most frequently used frames for a particular category are highlighted in Table 13. For some crime categories there are no frames that are used significantly more often than any other and thus no cells are highlighted. S/A frames that are not used for a crime category are left blank.

Table 13: Crime Categories by Scanning and Analysis Frames

Crime Cat	Total	RoutineAct	HotSpots	BrokenWin	80/20	CPTED	PlaceMgmt	RepeatVic	RiskyFac	SituatnlCP	SocialCtrl	At Risk	CrimePrev	Regulation	TradPolice
Total	298	89	71	43	23	16	11	11	8	3	3	2	1	1	1
Disorder															
YouthDisord/Vio	30	11	9	6	1	3	1	1	1	1		1			

Crime Cat	Total	RoutineAct	HotSpots	BrokenWin	80/20	CPTED	PlaceMgmt	RepeatVic	RiskyFac	SituatnlCP	SocialCtrl	At Risk	CrimePrev	Regulation	TradPolice
Graf/Vand	10	5	3	3				1							
Drugs	10		2		2				2		1				
Transients	9	2	2	2	1										
Prostitution	7	3													
StRace/shows	6	1		2											
MissingPeople	5	1			1		1								
AtRisk	5	1	1												
Alcohol	5	1	2	1					1						
IllegalCabs	2	2													
Other															
Admin	31		1	1	2			1							
RepeatOffs	14	3	2	1	8							1			
VehAccidents	12	4	1		1						1				
Other	7	3	1				1								
VehArson/Dump	4	4	1	2											
Terror/Hate	4	1	1												
Guns	4		1	1											
Fraud	4		1												
Traffic	3	1	1			1									
Fear	3			2											
Place-Based															
HotSpots	40	11	12	7		2	5								
ProbNghbrhd	26	5	6	13	2	2		1	1	1	1				
RiskyFacilities	4	2	1	1	1	2	1		3						
Property															
Burglary	13	6	9		1	3		2		1			1		
TheftFromAuto	11	8	5		1	1	1	1							
AutoTheft	7	2	2		2	1								1	1
Theft	5	3	2					1							
Violent															
ViolentCrime	6	3	3	1		1	1								
Domestic Violence	6	3	1					3							
Robbery	5	3	1												

Table 14 identifies the response frames that are used with the different crime categories. In general, the most commonly used response frames are crime prevention and traditional policing. At least one case from every crime category applies a crime prevention or traditional policing/ enforcement frame to their activities. Alternative problem frames are more popular than the three traditional frames for just five of the 29 crime categories. The traditional response frames, however, are not used in isolation from alternative frames. Cases in only two crime categories, fraud and terrorism/ hate crimes, solely used traditional response frames. Table 14 identifies that the remainder of the crime categories incorporate a wide variety of alternative frames in conjunction with the traditional response frames. The categories "problem neighborhoods" and "youth disorder and violence" incorporate the most diverse collection of problem response frames. Cases within each of these crime categories are addressed by combinations of fifteen different problem response frames. Among the larger crime groups, the disorder problems as a whole are more likely to turn to traditional policing responses. Place-based problems used the widest variety of response frames for all of the individual crimes within the group.

Table 14: Crime Categories by Response Frames

Crime Cat	Total	Crime Prev	Trad Police	Admin	CPTED	At Risk	SituatnlCP	Regulation	Hot Spots	PlaceMgmt	OffenderTrt	RoutineAct	BrokenWin	SocialCtrl	Repeat Vic	80/20	Redevlpmt	Pulling Lev
Total	298	182	174	93	79	74	64	45	39	35	31	23	19	19	12	10	10	4
Disorder																		
YouthDisor	30	21	20	8	8	22	6	7	5	1	2	3	2	1		2		1
Graf/Vand	10	6	7	3	1	3	3	1	3		3	2		2	2		1	
Drugs	10	6	5	5	2				3	2				2				2
Transients	9	2	5	3	2	6	1	3			3	1	1	2		1		
Prostitution	7	4	5	2	3	2	2	1			3	1	1					
StRace/shows	6	4	6	1	2	2	1	4										
MissingPpl	5	3	1	3		2				1						1		

Crime Cat	Total	Crime Prev	Trad Police	Admin	CPTED	At Risk	SituatnlCP	Regulation	Hot Spots	PlaceMgmt	OffenderTrt	RoutineAct	BrokenWin	SocialCtrl	Repeat Vic	80/20	Redevlpmt	Pulling Lev
AtRisk	5	2	1		1	3					2							
Alcohol	5	3	3	3	2	2	1		1		1							
IllegalCabs	2	2	2		1		2	1				1						
Other																		
Admin	31	12	2	20		2	1			1						1		
RepeatOffs	14	2	6	2		4					9		1			1		1
VehAccident	12	12	8	3	4		3	2	2									
Other	7	5	4	5		2	3	2	1	1	1			1				
VehArsn/Dmp	4	3	3		1	1	4		2				1					
Terror/Hate	4	2	3	3														
Guns	4	3	4	3		1	1		1		1		1				1	
Fraud	4	4	2	2														
Traffic	3	3	3		1		1			1								
Fear	3	2	2	1	1	1	1					1						
Place-Based																		
HotSpots	40	16	32	5	19	6	13	10	4	7		1	3	6			3	
ProbNghbrhd	26	15	18	8	11	7	5	6	4	7		2	8	5	2	1	5	
RiskyFacilies	4	3	1	1	2	1	1	2		1			1					
Property																		
Burglary	13	11	7	3	8	1	2		3	4	2	2			2	1		
TheftFrmAuto	11	10	4	1	5		5	1	5	1		4			2			
AutoTheft	7	6	7	3	1	1	2	1			3	2				2		
Theft	5	4	2	2	1		1		2	2		1			1			
Violent																		
ViolentCrime	6	6	5		2		4	3	3	4		1						
DV	6	5	3	3		4		1			1				3			
Robbery	5	5	3		1	1	1			2		1						

How else do Frames Vary Among Projects?

Summary:

- **How else do frames vary among projects?**
  - Cases that are a part of the finalist groups have visibly different framing activities than cases in the general samples.
    - Differences between cases submitted to the Goldstein and Tilley awards are smaller.
  - Problem frames used by cases in the sample do not demonstrate strong variations over time.

As I moved through the data to answer the initial questions, other trends also became apparent. Although demographic information about the project teams was not consistently available from one project to the next, there are other project characteristics that I was able to assess. In the first section of my analysis I was able to examine some of the influences that being either a Goldstein or Tilley submission or a member of the sample or the finalist group has on the frames that are selected. In general, there appear to be more differences between the sample and finalist groups than the Goldstein and Tilley groups. This was shown in the differences between the cases that were unframed during scanning and analysis as well as with the number of frames that were introduced per case (see Tables 9 and 10). The cases that have been judged to be strong enough to be finalists are, indeed, different from the general sample cases. The primary area where the Goldstein and Tilley groups appear to be different is in the use of routine activities theory. Additionally, there are some differences in the potential diversity of frames that might be considered. The Tilley cases, and the Tilley finalists in particular, used a smaller pool of potential problem frames than did the Goldstein cases.

Additionally, it is possible to examine whether there are temporal variations in problem framing over time. Do problem framing activities among the total sample or within the four

award segments change from 2000 through 2009? There is an assumption that as a procedure or methodology becomes better known within a population that its use may evolve from a rudimentary tool to a more advanced one. In problem-oriented policing, such an assumption suggests that the use of alternative problem frames will increase while the use of traditional frames may hold constant or decrease. Tables 15 and 16 help us to examine this issue by documenting the counts of the S/A and response frames from 2000 through 2009.

We know based on Table 8 that the number of cases submitted during any one year varied, as did the number of cases included in the finalist segments. In Table 15, I identify the distribution of the use of problem definition frames over the ten years of the analysis for the total sample. The annual proportions presented in Table 15 suggest that there has been an increase in the use of three frames over the ten year period: routine activities, hot spots of crime, and CPTED. The increase in the use of CPTED is slight, but the frame was only applied one year from 2000 through 2003, but began to be used annually beginning in 2004. The increase in the use of hot spots of crime is largely driven by one year: 2005. The increase in the use of routine activities theory may be linked to the Tilley Award submission recommendation that project teams use routine activities theory to guide their scanning and analysis activities. There are no other noticeable changes in the way that project teams frame problem definitions over the ten years of the study.

Table 15: Temporal Distribution of Problem Definition Frames (S/A) in the Total Sample (Proportion per Year)

	Total	RoutineAct	HotSpots	BrokenWin	80/20	CPTED	PlaceMgmt	RepeatVic	RiskyFac	SituatnlCP	SocialCtrl	AtRisk	CrimePrev	Admin	Regulation
2000	25	.28	.12	.12	.12		.08	.08	.16						
2001	38	.16	.21	.16	.08	.05	.03	.03	.05					.03	
2002	37	.30	.27	.14	.05		.03	.05			.03	.03			
2003	34	.21	.18	.12	.06		.03								.03
2004	26	.31	.12	.15	.15	.12	.04								
2005	22	.50	.50	.18	.05	.14	.09	.05		.05	.09		.05		
2006	29	.17	.21	.14	.14	.03		.03				.03			
2007	27	.41	.19	.19	.07	.07	.04								
2008	40	.38	.38	.18	.05	.08		.08	.03	.05					
2009	20	.40	.20	.05		.10	.10	.05	.05						

Table 16 identifies the distribution of the problem response frames from 2000 through 2009 for the total sample. The only response frame that has a consistent change in usage over time is crime prevention. Otherwise, there are no other general increases or decreases in the use of certain response frames over time: Frames that are heavily used early in the review period continue to be popular, while frames that are less common continue to be used less frequently.

Table 16: Temporal Distribution of Problem Response Frames in the Total Sample (Proportion per Year)

	Total	CrimePrev	TradPolice	Admin	CPTED	AtRisk	SituatnlCP	Regulation	HotSpots	PlaceMgmt	OffenderTr	RoutineAct	BrokenWin	SocialCtrl	RepeatVic	80/20	Redevlpmt	PullingLev	Other	RiskyFac	DefSpace
2000	25	.48	.60	.44	.36	.12	.16	.12	.12	.24	.08	.04		.12	.12	.04	.08				
2001	38	.58	.55	.34	.18	.24	.21	.18	.13	.05	.03	.03	.11	.03	.03		.03	.03		.03	
2002	37	.43	.57	.38	.16	.22	.16	.05	.14	.08	.08		.05	.11	.05	.03	.05				
2003	34	.47	.65	.29	.21	.26	.24	.18	.12	.12	.18	.03	.03	.09							
2004	26	.69	.54	.15	.38	.23	.35	.15	.08	.15	.12	.12	.08	.08	.04	.12					
2005	22	.64	.50	.32	.27	.27	.18	.14	.09	.18	.18	.09	.05	.14		.09					.05
2006	29	.66	.55	.28	.24	.24	.24	.10	.21	.14	.03	.07	.03	.03	.03		.10	.03			
2007	27	.67	.56	.22	.33	.26	.19	.11	.11	.11	.22	.11	.15			.04	.07	.04	.07		
2008	40	.80	.73	.28	.35	.25	.25	.28	.18	.10	.08	.15	.08	.05	.05	.05					
2009	20	.75	.50	.45	.20	.45	.15	.15	.10	.05	.10	.20	.05		.10			.05			

To confirm the findings from Tables 15 and 16, I further broke out the data from each table into the four separate sample segments (see Appendix G). When looking within and then across the segments, the data identifies that the increase in the use of the routine activities theory frame in the S/A phase is due to increases in use in both the Tilley sample and the Goldstein finalist groups. The data for the individual segments does not provide any additional information about changes in the way that project teams approach problem framing over time, either to define the problem or in the development of problem responses. The small number of cases that are in the annual segments, particularly for the finalists groups (from three to eight cases), however, limits the ability to identify subtle changes.

The final temporal issue that I examined was whether the number of cases that were not framed during the scanning and analysis phase changed over time. Table 17 shows the distribution of unframed cases over time and by country. Approximately 59% of the cases that lacked frames during the problem definition phase occurred during the first five years of the review. Cases were slightly more likely to go unframed during the first five years of the review period than the last five years.

Table 17: Temporal Distribution of Unframed S/A Phase Cases in the Total Sample (N and Cumulative Percentages Shown)

	Total		US		UK		CA	
	N	Cum %	N	Cum %	N	Cum %	N	Cum %
2000	14	12.3	8	13.3	6	12.0	0	0.0
2001	13	23.7	10	30.0	3	18.0	0	0.0
2002	13	35.1	6	40.0	6	30.0	1	25.0
2003	17	50.0	10	56.7	6	42.0	1	50.0
2004	10	58.8	2	60.0	8	58.0	0	50.0
2005	4	62.3	2	63.3	2	62.0	0	50.0
2006	13	73.7	6	73.3	6	74.0	1	75.0
2007	11	83.3	5	81.7	6	86.0	0	75.0
2008	11	93.0	7	93.3	4	94.0	0	75.0
2009	8	100.0	4	100.0	3	100.0	1	100.0
Total	114		60		50		4	

Limitations Reminder

This research is representative only of the cases being studied and has limited generalizability to any larger populations. Further, there are a number of potential limitations in the research due to the retrospective drafting and self-nomination process for submissions as well as framing influences from the submission requirements and judging criteria. However, these limitations are a necessary evil in a field of work that previously has not been examined. Now that we have established a baseline for problem framing in problem-oriented policing, future research may attempt to address some of these validity concerns.

Summary

In Chapter 7, I began to explore my primary research question, "What frames are used?" as well as several related questions. Based on the results of the content analysis, I have reached the following initial conclusions about problem framing in problem-oriented policing:

- **What frames are used?**
  - Alternative frames are primarily used in the scanning and analysis phase.
    - The most frequently used frames are routine activities theory, hot spots of crime, and broken windows.
  - However, in a large number of cases no frames are used to define the problems.
    - 38% of the total sample appears to be unframed.

  - Traditional frames are primarily used in the response phase.
    - Traditional policing/ enforcement, crime prevention, and administrative response frames are most likely to be used.
    - These are followed by a wide range of alternative frames. The most frequently used alternative frames are CPTED, at-risk treatment, and situational crime prevention.

  - Descriptive frames are more likely to be used during scanning and analysis and prescriptive frames are more likely to be used during response activities.
  - Problem definition frames guide response frames, but in an indirect manner.

- **Are different frames clustered around specific crimes?**
  - Some crimes are more likely to be defined and responded to by a small number of frames while other crime problems invite the consideration of a wider array of frames.
    - Place-based and property crimes in particular are most likely to be defined by an extensive array of both S/A and response frames.

- **How else do frames vary among projects?**
  - Cases that are a part of the finalist groups have visibly different framing activities than cases in the general samples.
    - Differences between cases submitted to the Goldstein and Tilley awards are smaller.
  - Problem frames used by cases in the sample do not demonstrate strong variations over time.

The data presented in this chapter confirms and builds upon both assumptions and previous research findings about problem-oriented policing. Further, it provides a basis for future exploration about some of the potential limitations of problem-oriented policing. In the following chapter I will add to these results with my findings from a survey of officers. Then, in Chapter 9, I will discuss the implication of these findings.

Chapter 8 – Survey Vignettes: What More Can We Learn About Frames?

In Chapter 7, I presented the results of the content analysis of submissions to two awards for problem-solving and problem-oriented policing. That research was able to answer my primary research question, as well as provide a few additional pieces of information about the problem framing process in problem-oriented policing. But, are those findings specific only to the sample studied? Here, I present data from a survey of officers engaged in problem-oriented policing work. This work attempts to gauge whether the findings from the content analysis are also true among the survey respondents. Overall, the survey findings support some of the previous findings and also provide additional information about problem framing.

Overview

Summary:

- **Overview of frame usage:**
  - When the problem description is vague (Vignettes 2 and 3) or brief (Vignette 3), the majority of respondents failed to frame the problem definition.

In this part of my analysis, the survey of officers, I also measure the frames that are used to describe and respond to problems. In the survey, officers were presented with three vignettes that described crime and disorder problems. They were asked to describe 1) what they believed the problem to be and then 2) the response that they would undertake. In this exercise, all officers reviewed the same set of problems so that I could examine the similarities and differences in their responses. This is in contrast to the content analysis where every project team focused on a different project. I examined the survey data in the same manner that I conducted the content analysis.

Approximately 154 police officers who attended the 2013 Problem-Oriented Policing Conference were invited via email to participate in the survey. Potential respondents were from the US, UK, Bermuda, New Zealand, and Canada. They were offered the option to complete the survey online or by mail. The entire survey was completed online by 29 officers (a response rate of 19%). Several additional respondents who completed just the first half of the survey were removed from the final results. No responses were received via mail.

Table 18 below provides a brief summary of the respondent framing activities for each of the three vignettes. The table identifies both the percent and count of how often no frame was provided, where multiple frames were provided, and then the average number of frames provided per vignette (excluding instances where no frame was provided). In this section of the work, the problem definition frames are equivalent to the scanning and analysis frames used in the content analysis.

Table 18: Respondent Framing Activities

Vignette:	No Frame Provided Percent (Count)	Multiple Frames Provided Percent (Count)	Frames Per Vignette Mean
1			
Problem Definition	20.7 (6)	31.0 (9)	1.4
Problem Response	0.0 (0)	86.2 (25)	2.3
2			
Problem Definition	58.6 (17)	3.4 (1)	1.1
Problem Response	6.9 (2)	75.9 (22)	2.3
3			
Problem Definition	65.5 (19)	0.5 (1)	1.1
Problem Response	20.7 (6)	55.2 (16)	1.9
Total	100.0 (29)	100.0 (29)	

Each vignette in the survey has a purpose. The first vignette illustrates a stereotypical theft from auto problem. The second vignette invokes a variety of different problems associated with a downtrodden neighborhood that could be connected to a routine activities frame or any of a variety of place-based frames. The third vignette is purposefully vague about whether or not a crime problem exists. After reviewing all of the responses, one of the most interesting developments is that for the third vignette 75% of the respondents specifically noted that more information and analysis was needed to determine the specific nature of the problem. In this case 66% of respondents did not frame the problem definition. In contrast, a large majority of the respondents did frame the response. In the second vignette, there was a similar pattern with a failure to frame the problem definition, but not the response. In this vignette, however, the respondents did not specifically note that they needed more data or analysis to understand the problem. These results suggest that in the absence of information useful for a descriptive frame, police jump to the response frame. However, there appear to be differences in reaching this conclusion for problems that are described briefly versus problems that are described vaguely.

What Frames are Used?

Summary:

- **What frames are used?**
  - Alternative frames are primarily used in the scanning and analysis phase.
  - Traditional policing is the most popular response frame for all three cases.
    - Crime prevention is the second most popular response in two of the three vignettes.
  - When problems are defined in a vague manner (Vignette 2), a wide variety of response frames are discussed. But, when problems are briefly described (Vignette 3), respondents are less likely to consider alternative responses.

In this section, I review the frames invoked by the respondents in each vignette. A summary of the problem frames used in the survey is presented in Table 19. In the first vignette, the theft issue at parking lots is defined by over two-thirds of the respondents as a situational crime prevention issue. Many respondents particularly note that there must be increased opportunities for theft in these parking areas (N=18). In six of those cases, the problem is framed as a joint issue associated with place management and situational elements. Although the problem is largely framed as a situational crime prevention problem, a large majority of the respondents focused on traditional responses, including increased patrols (traditional policing) and crime prevention education, to respond to the problem. This is surprising due to the identification of situational crime prevention in the problem definition. While the respondents identified the opportunistic nature of the crimes, this is not translated into their response (only one individual chose to frame their response in terms of situational crime prevention).

The second vignette invited the most variation in the identification of response frames; however, the respondents were perplexed as to how to define the problem. This vignette provided a large variety of information about the problems, but in doing so purposefully made the problem vague. Less than one-half of the respondents (42%) applied a frame to define the problem; the remainder did not use a problem frame to define the problem. The most commonly used frames to define and describe the problem are defensible space (N=8) or broken windows (N=4). This response category is the least likely to invoke multiple frames (1.9 frames per respondent). However, thirteen different potential response frames are raised, including the three traditional frames and ten alternative frames. The traditional response frames of crime prevention education and traditional policing/ enforcement are dominant, with 75% of the respondents noting one or both of these frames. This is closely followed by the crime prevention

frame. In contrast, the respondents were not in agreement about which alternative frames should be considered. Although the majority of respondents did not frame the definition of this problem, only two respondents failed to frame the problem response.

In the third vignette a large majority of respondents (75%) noted that more information is needed to both define and respond to the problem. Only 34% of the respondents applied a frame to the definition of the problem. The most frequently used frames to define the problem are CPTED, a lack of traditional policing efforts, and social control. Respondents who identified a response frame for this problem are quite clear that the response should be framed in terms of a combination of CPTED (N=18), increases in traditional policing and enforcement (N=18), and crime prevention education (N=8). One respondent specifically noted that such traffic issues require a "3E" response of enforcement, education, and engineering. The 3E concept, a combination of three of the response frames, is also a problem frame in and of itself.

Table 19: Survey Frames
(N=29)

Vignette 1: Officers in the central business district have noticed an increase in calls for service to parking lots.		
Problem Definition Frames:	Counts	Percent
Situational Crime Prevention	20	69.0
Place Management	7	24.1
80/20	5	17.2
Problem Response Frames:		
Traditional Policing	27	93.1
Crime Prevention	17	58.6
CPTED	9	31.0
Routine Activities	4	13.8
80/20	4	13.8
Place Management	3	10.3
Situational Crime Prevention	1	3.5
Broken Windows	1	3.5

Vignette 2: The east side of town has seen an increase in calls that are related to general nuisance problems.		
Problem Definition Frames:	Counts	Percent
Defensible Space	8	27.6
Broken Windows	4	13.8
Social Control	1	3.5
Problem Response Frames:		
Traditional Policing	19	65.5
Crime Prevention	15	51.7
CPTED	5	17.2
At Risk Treatment	5	17.2
Broken Windows	4	13.8
Hot Spots	2	6.9
Place Management	2	6.9
80/20	2	6.9
Regulation	2	6.9
Administration	2	6.9
Situational Crime Prevention	1	3.5
Repeat Victimization	1	3.5
Social Control	1	3.5
Vignette 3: Elected officials have expressed concern about vehicle crashes in your jurisdiction.		
Problem Definition Frames:	Counts	Percent
CPTED	5	17.2
Traditional Policing	4	13.8
Social Control	1	3.5
Routine Activities	1	3.5
Problem Response Frames:		
Traditional Policing	18	62.1
CPTED	18	62.1
Crime Prevention	8	27.6

Due to the fact that half of the respondents failed to apply a problem definition frame for the second and third vignettes, it is not useful to identify the networks for the definition frames associated with response frames, as I did in the content analysis. However, the findings from the survey do support the content analysis results. For example, while alternative problem frames are more likely to be used in problem definitions, traditional problem frames (specifically traditional policing and crime prevention education) are the most frequently used responses. The traditional frames are then followed by alternative frames, particularly CPTED. Additionally, the survey framing results also suggest that there are some frames that are more likely to be used

to describe a problem rather than to prescribe a response for the problem (e.g. situational crime prevention in vignette 1). Unfortunately, the number of instances where the problem definition was unframed in vignettes 2 and 3 limits the strength of this finding.

Are Different Frames Clustered Around Specific Crimes?

Summary:

- **Are different frames clustered around specific crimes?**
  - No matter what the crime type, the most popular response frame focused on traditional policing activities.
  - When problems are vaguely defined (Vignette 2), a wide variety of response frames are discussed. But, when problems are briefly described (Vignette 3), respondents are less likely to consider alternative responses.

In the survey of officers, I also examined whether certain frames are clustered around specific crimes – in this case, the three crimes presented in the vignettes (thefts from autos, problem neighborhood, and vehicle accidents). In the figures below, I present the problem definition (S/A) and response frames that are applied to each vignette (see data in Table 19 above). The innermost circle in the figure identifies the crime problem, the first ring (in blue) identifies the definition frames and the outer ring (in purple) identifies the response frames that are noted for each case. The varying sizes of the frame boxes represent the relative number of respondents who selected that frame (i.e. larger boxes represent frames selected by more respondents).

In the first vignette, respondents primarily use situational crime prevention and place management to frame their definitions of the crime problem, with a few respondents using the 80/20 rule. They then use traditional policing measures, crime prevention, CPTED, routine activities, and the 80/20 rule as the primary ways to frame their responses.

Figure 6: Frames for Vignette 1 – Thefts from Autos

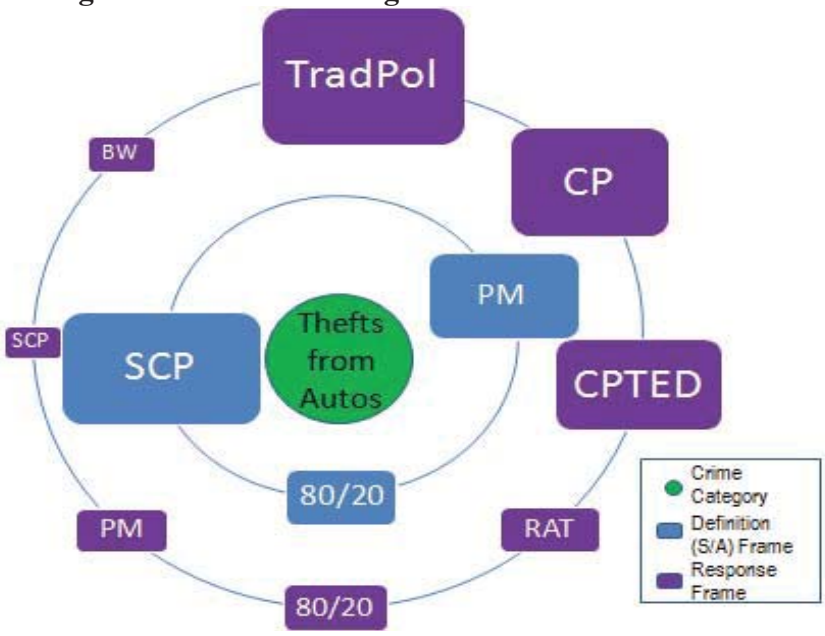


Figure 7: Frames for Vignette 2 – Problem Neighborhood

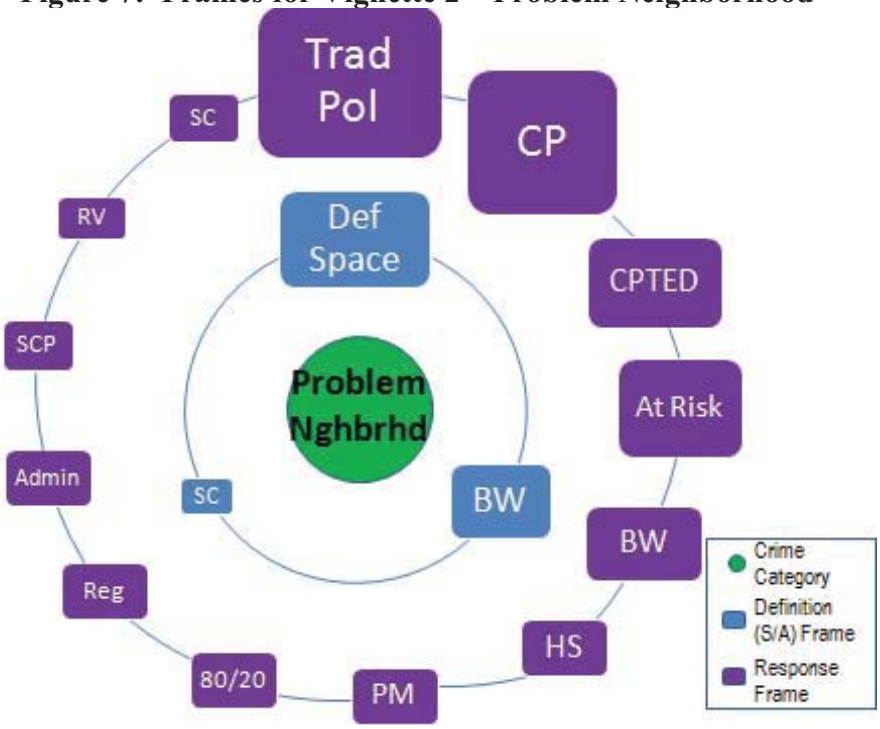
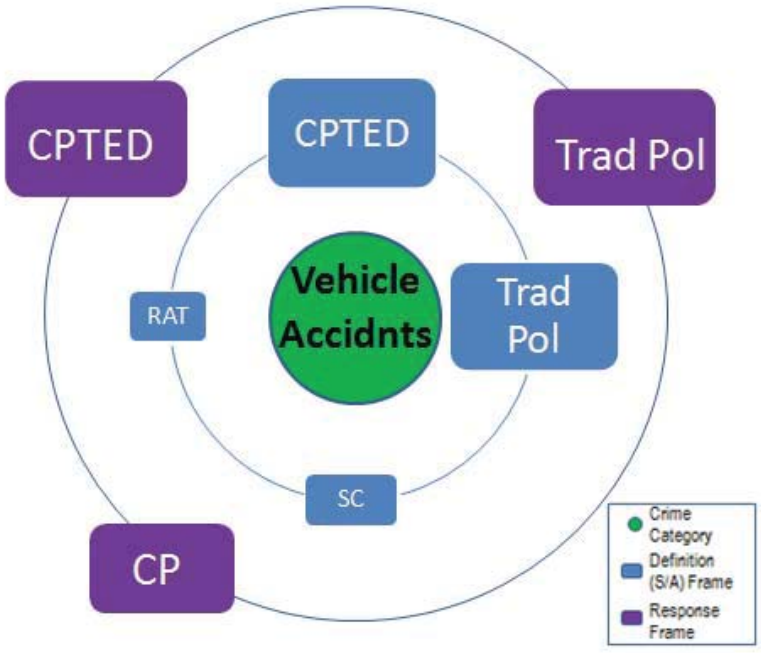


Figure 7 identifies that defensible space and broken windows are the most common problem definition frames for the problem neighborhood vignette. Although more than half of the respondents failed to frame the problem definition for this vignette, there is a wide variety of response frames identified in the survey. Thirteen different response frames are identified by the respondents, with traditional policing and enforcement and crime prevention being the two most common frames, followed by at-risk treatment and CPTED.

The vehicle accident vignette provided the least amount of information to respondents and, as a result, is the least likely to be given a problem definition or response frame by survey respondents. Figure 8 depicts the frames that are used to define and respond to this problem. The vehicle accident problem is framed as a CPTED issue, a lack of enforcement issue, a social control problem, and a routine activities problem. Respondents who provided a response frame for the case, however, are largely unified in their responses. The responses for this problem are focused on enforcement, engineering, and education.

Figure 8: Frames for Vignette 3 – Vehicle Accidents



In Table 20, I provide a comparison of the frames used in the vignettes with the frames used in the same types of crimes in the content analysis (combining data from Tables 13, 14, and 19). This effort aids in the identification of frames that might be regularly linked to certain types of crimes. In Chapter 7, we saw that the most common S/A frames for thefts from auto problems among the project teams is routine activities, followed by hot spots. The most common response frames for the content analysis are crime prevention education, CPTED, hot spots, and situational crime prevention. In Table 20, we can compare the frames that are identified for both the vignettes and the content analysis. When we focus on the first row, thefts from autos, we see that there are more differences than similarities between the two groups of frames for thefts from autos, particularly for the problem definition. The differences may be a result of how the problems are described, with the vignette focused on dedicated parking areas, while the content analysis cases are primarily focused on neighborhood streets or in central business districts. Even though both pieces of research are focused on thefts from autos, differences among the places where the crimes are committed may influence the frames used to define and respond to a problem.

Table 20: Comparison of Frames

Vignette/ **Crime Type**	**Vignette** **Percent (Count)**	**Content Analysis** **Percent (Count)**
1 - Theft from Autos	N=29	N = 11
Problem Definition Frames:		
Situational Crime Prev	69.0 (20)	--
Place Management	24.1 (7)	9.1 (1)
80/20	17.2 (5)	9.1 (1)
Routine Activities	--	72.7 (8)
Hot Spots	--	45.5 (5)
CPTED	--	9.1 (1)
Repeat Victimization	--	9.1 (1)
Problem Response Frames:		
Traditional Policing	93.1 (27)	36.4 (4)
Crime Prevention	58.6 (17)	90.1 (10)
CPTED	31.0 (9)	45.5 (5)
Routine Activities	13.8 (4)	36.4 (4)
80/20	13.8 (4)	--

Place Management	10.3 (3)	9.1 (1)
Situational Crime Prev	3.5 (1)	45.5 (5)
Broken Windows	3.5 (1)	--
Admin	--	9.1 (1)
Regulation	--	9.1 (1)
Hot Spots	--	45.5 (5)
Repeat Victimization	--	18.2 (2)
2 - Problem Neighborhood	N= 29	N=26
Problem Definition Frames:		
Defensible Space	27.6 (8)	--
Broken Windows	13.8 (4)	50.0 (13)
Social Control	3.5 (1)	--
Hot Spots	--	23.1 (6)
Routine Activities	--	19.2 (5)
80/20	--	7.7 (2)
CPTED	--	7.7 (2)
Repeat Victimization	--	3.8 (1)
Risky Facilities	--	3.8 (1)
Situational Crime Prev	--	3.8 (1)
Problem Response Frames:		
Traditional Policing	65.5 (19)	69.2 (18)
Crime Prevention	51.7 (15)	57.7 (15)
CPTED	17.2 (5)	42.3 (11)
At Risk Treatment	17.2 (5)	26.9 (7)
Broken Windows	13.8 (4)	30.8 (8)
Hot Spots	6.9 (2)	15.4 (4)
Place Management	6.9 (2)	26.9 (7)
80/20	6.9 (2)	3.8 (1)
Regulation	6.9 (2)	23.1 (6)
Administration	6.9 (2)	30.8 (8)
Situational Crime Prev	3.5 (1)	19.2 (5)
Repeat Victimization	3.5 (1)	7.7 (2)
Social Control	3.5 (1)	19.2 (5)
Redevelopment	--	19.2 (5)
Routine Activities	--	7.7(2)
3 - Vehicle Accidents	N=29	N=12
Problem Definition Frames:		
CPTED	17.2 (5)	--
Traditional Policing	13.8 (4)	--
Social Control	3.5 (1)	8.3 (1)
Routine Activities	3.5 (1)	33.3 (4)
Hot Spots	--	8.3 (1)
80/20	--	8.3 (1)
Problem Response Frames:		
Traditional Policing	62.1 (18)	66.7 (8)
CPTED	62.1 (18)	33.3 (4)
Crime Prevention	27.6 (8)	100.0 (12)
Administration		25.0 (3)
Situational Crime Prev		25.0 (3)
Regulation		16.7 (2)
Hot Spots		16.7 (2)

In contrast to the theft from auto issue, the problem neighborhood vignette responses have more similarities with the problem neighborhoods in the content analysis. The second row of Table 20 shows that defensible space and broken windows are the most common problem definition frames for this vignette. In the content analysis there are several more potential definition frames used, including hot spots and routine activities, but broken windows is the most popular problem definition frame. While thirteen potential response frames are introduced for this vignette, there is an even more diverse group of frames introduced for the content analysis. In the survey, traditional policing and enforcement and crime prevention are the two most common frames, followed by at-risk treatment and CPTED. These are similar to the most popular response frames in the content analysis: traditional policing, crime prevention, broken windows, CPTED, and at risk frames.

In the third row of Table 20, we see that in the vignette, the vehicle accident problem is framed as a CPTED issue, a lack of enforcement issue, a social control problem, and a routine activities problem. The vehicle accident category in the content analysis cases is primarily defined by routine activities theory, but individual cases also framed the problem with hot spots, the 80/20 rule, and social control. The differences in the problem definition frames may partially be explained by the fact that less than half of the respondents and projects that focused on this issue applied an initial frame to this issue. The problem response frames, however, are more unified. The vignette responses for this problem focused on enforcement, engineering, and education. In the content analysis the primary response frames identified are education and enforcement. CPTED is a secondary response frame, as is the related situational crime prevention and three other response frames.

It is clear from a comparison of the two sets of results that when respondents are examining the same type of problem, the set of problem definition and response frames that they consider are more likely to be similar. The frames that are used are not the same, but come from a smaller group of possible frames. This highlights the importance of the situational nature of problems, but leaves room to consider the influence of personal experiences of the problem-solvers in the use of particular frames.

How else do Frames Vary Among Survey Respondents?

Summary:

- **How else do frames vary among survey respondents?**
  - There are no strong and consistent differences in framing activities among the survey sample respondents.

The survey was completed by 29 police officers from a variety of different backgrounds. To determine whether any of the results are being influenced by a specific segment of the survey group, I also looked at some of the demographic characteristics of the respondents. This survey is specific to officers who attended the 2013 Center for Problem-Oriented Policing Conference. However, we can make the assumption that officers who attended the 2013 POP conference are a subset of all officers who are involved in problem-oriented policing. Thus, while it is important to note that these results are not generalizable to the entire population of police officers engaged in problem-oriented policing, they are generalizable to a subset of that population. Table 21 provides a summary of the demographic information collected from the survey respondents.

Table 21: Survey Demographics

	Response Counts (N=29)	Percent of Total
Agency Location (Region/Country)		
US	27	93.1
CA	1	3.5
FL	1	3.5
IL	3	10.3
KY	2	6.9
MI	2	6.9
MN	1	3.5
MO	1	3.5
NC	1	3.5
NV	1	3.5
OH	3	10.3
PA	4	13.8
SC	3	10.3
TX	2	6.9
WI	2	6.9
UK	1	3.5
Bermuda	1	3.5
Rank/ Title		
Patrol Officer	7	24.1
Deputy Sheriff	1	3.5
Detective	2	6.9
Sergeant	10	34.5
Lieutenant	4	13.8
Captain	3	10.3
Assistant Chief	1	3.5
Chief	1	3.5
Size of Agency		
< 500 Officers	16	55.2
> 500 Officers	12	41.4
No Response	1	3.5
Time in Current Role / Total Time in Law Enforcement (in years)	Average 4.1 / 18.3 years	
Gender		
Male	24	82.8
Female	5	17.2
Education		
Some College	4	13.8
2Year Degree	4	13.8
4 Year Degree	12	41.4
Advanced Degree	9	31.0

	Response Counts (N=29)	Percent of Total
Attended 2013 POP Conference		
Yes	29	100.0
Attended Previous POP Conferences		
No	15	51.7
Yes	14	48.3
Special Training in POP		
In-Service Training through Agency	18	62.1
Academy Training	10	34.5
Read article/ book	21	72.4
Other training	7	24.1
None	5	17.2
Use POP in Work		
Never	1	3.5
Less than 1 year	5	17.2
Between 1 and 5 years	11	37.9
Between 5 and 10 years	3	10.3
More than 10 years	9	31.0
Department Considers Problem-Solving and POP a Priority		
No	7	24.1
Yes	22	75.9
Knowledge of POP Required for Promotion		
No	16	55.2
Yes	13	44.8

The respondents involved in problem-oriented policing in the survey have diverse backgrounds. This entire group attended the 2013 Problem-Oriented Policing Conference. There are 27 respondents from the US, one from the UK, and one from Bermuda. The American respondents come from 14 different US states. The officers represent every rank from patrol officer to chief, including detective and deputy sheriff. One third of the respondents hold the rank of sergeant. Similar to national statistics, over 80% of the sample is male (nationally 88% of police officers are men). The bulk of respondents have a college degree, with just under one third of the total having an advanced degree. Among the respondents, 62% have had in-service

training on problem-oriented policing and 72% have read a book or article on POP. Approximately 80% of the respondents have been using problem-oriented policing in their work for a year or more, with 31% using problem-oriented policing in their work for over ten years. Approximately 76% of the respondents report that they work in a department that considers problem-oriented policing and problem-solving a priority. However, having POP as a departmental priority does not lead to a requirement that knowledge of problem-oriented policing be required for promotions. Just over one half of the respondents report that knowledge of POP is required as part of their promotion process.

Previous research has suggested that certain demographic variables, such as gender, education, rank, agency size, or agency prioritization of POP, could be linked to varying levels of support for problem-oriented policing. In this work, I examined whether these demographic variables might be linked to differences in framing activities. Overall, there are no consistently strong differences in problem framing based on demographic variables. Tables supporting this conclusion are available in Appendix H.

Limitations Reminder

As I noted earlier, there are several limitations associated with this group of survey respondents. The respondents are a small group of officers who 1) attended the 2013 POP Conference and 2) volunteered to participate in the survey. While the respondents are representative of a wide range of backgrounds, ranks, agencies, and regions, the findings of the research are only true for the particular individuals surveyed and are not a portrayal of the field as a whole. Further, the responses in this survey may be influenced by the fact that respondents are aware that their invitation to participate in the research was linked to their attendance at the 2013 POP Conference.

Summary

In Chapter 8, I expanded my study of problem framing in problem-oriented policing from a single source examination of POP projects into a mixed methods review. In this chapter, I examined the results of a survey examining how officers engaged in problem-oriented policing might frame three specific crime and disorder problems. In contrast to the content analysis, where a wide variety of problem projects were examined, this review examined survey respondent reactions to the same three problems. In Chapter 8, I found support for several of my previous research findings. I was also able to expand upon previous findings. In this chapter, I specifically identified the following results:

- **Overview of frame usage:**
  - When the problem description is vague (vignettes 2 and 3) or brief (vignette 3), the majority of respondents failed to frame the problem definition.

- **What frames are used?**
  - Alternative frames are primarily used in the scanning and analysis phase.
  - Traditional policing is the most popular response frame for all three vignettes.
    - Crime prevention is the second most popular response in two of the three vignettes.
  - When problems are defined in a vague manner (Vignette 2), a wide variety of response frames are considered. But, when problems are briefly described (Vignette 3), respondents are less likely to consider alternative responses.

- **Are different frames clustered around specific crimes?**
  - No matter what the crime type, the most popular response frame focused on traditional policing activities.

- **How else do frames vary among survey respondents?**
  - There are no strong and consistent differences in framing activities among the survey sample respondents.

In the next chapter, I summarize the findings from both Chapter 7 and Chapter 8 and connect them to recommendations for improving problem framing within problem-oriented policing.

Chapter 9 – Reframing our Understanding of Problem-Oriented Policing

Problem Frames

In this dissertation I have attempted to examine how problem framing influences problem-oriented policing. It is well established that frames are used to explain problems. Previous research suggests that how a problem is framed will influence the responses developed for that problem (Fagley & Miller, 1990; Tversky & Kahneman, 1986). In the current research, I have examined that idea in relation to problem-oriented policing, a style of policing that encourages a more in-depth understanding of crime problems to improve problem responses. If the framing of a problem has a direct influence on the responses that are undertaken, then this effect should be integral to problem-oriented policing. Unfortunately, this issue has been little studied within policing and has not at all been applied to problem-oriented policing. As a result, in this work I have undertaken an examination of the problem framing efforts documented in submissions to two awards for excellence in problem-solving and then compared those findings with a survey of officers engaged in problem-oriented policing. Although there are limitations in the research, this initial examination of problem framing in problem-oriented policing will help to provide the field with a baseline for future research on the topic.

Statements about Problem Framing in Problem-Oriented Policing

In the course of my research, I have reached several conclusions about problem framing in problem-oriented policing among my sample groups. These conclusions are divided among three areas: usage of alternative and traditional problem frames, similarities and differences within samples, and overarching findings. In short, I have found:

Usage of Alternative and Traditional Problem Frames:

1. There is awareness of alternative problem frames among those conducting problem-oriented policing projects.
2. In the scanning and analysis phase of projects, officers and departments either apply alternative frames to define and describe problems or they do not frame the problem.
3. The majority of officers and departments in the sample use traditional problem frames in their responses, either by themselves or in combination with alternative response frames.

Similarities and Differences within Samples:

4. There are clear differences in the framing activities of finalist and general sample groups: finalist projects are more thoroughly framed. In contrast, there are not strong differences between the frames used by the Goldstein and Tilley samples.
5. Contrary to initial assumptions, there are no strong differences in the use of frames over time in the content analysis or among different types of respondents in the survey.

Overarching Findings:

6. Descriptive frames are more likely to be used during scanning and analysis and prescriptive frames are more likely to be used during response activities.
7. Problem definition frames guide response frames, but in an indirect manner.
8. Weak or nonexistent scanning and analysis framing activities lead to an increase in the use of traditional response frames; and
9. The content and length of a problem definition influences the responses that are introduced. Vaguely defined problems are more likely to lead to the introduction of a wide variety of problem frames. Brief problem descriptions are less likely to result in the use of alternative problem frames.

In the following sections I discuss each conclusion, summarizing the findings and their implications for policy and training. Then, if applicable, I also discuss potential limitations of the current research or opportunities for future research.

1. Awareness of Alternative Frames

Police officers and departments engaged in problem-oriented policing are, as encouraged by Goldstein (1979; 1990), using alternative problem frames to define and respond to problems in their communities. Although the level with which alternative frames are incorporated into problem-solving work varies, there is awareness among the majority of officers and departments sampled for this work.

Overall, the use of alternative problem framing is greatest during the scanning and analysis phases of projects. It appears to be more difficult for officers and project teams to incorporate alternative frames into problem responses. There also still remains a group of officers and departments who do not use frames to define and describe their problems. In both the content analysis and the surveys there was evidence that in some situations problem frames were not used to define or describe a problem. In 38% of the 298 POP project submissions, there was no frame used to define the problem. Further, in the survey, respondents were much more likely to provide a problem frame to define the problem in the first vignette (79% of respondents) than the second (41%) and third (35%) vignettes.

Although there is a general recognition of alternative problem frames among those conducting problem-oriented policing projects, we need to reinforce the importance of using alternative frames. Rossmo (2009) recommends that police investigators constantly consider alternative explanations for how crimes occur. Similarly, POP officers need to constantly seek out alternative problem definitions and potential responses to ensure that they are not simply

satisficing. In the parlance of problem-oriented policing, officers need to be reminded to conduct thorough scanning and analysis exercises and then search out a variety of response alternatives. Such activities should naturally introduce a variety of alternative frames into problem-solving work.

When a project team is searching for potential problem frames, they can also turn to previous POP efforts to get a sense of what frames could be considered. While I created Tables 13 and 14 to summarize my findings, they can also be used by police to identify how project teams might begin to frame problem-oriented policing projects. For example, an agency that identifies that they have a problem with disorderly youth could look at Table 13 and say, "In previous POP projects dealing with disorderly youth, teams have primarily used routine activities, hot spots of crime, and broken windows frames to define their problems. However, projects have also considered a few other problem frames on an individual basis." This may increase or decrease the realm of potential frames that a team is considering to define their problem.

2 and 3. Alternative Framing during Scanning/ Analysis and Response Phases

In his 1990 text, Goldstein discusses the value of mixing traditional with alternative responses. However, there is also an emphasis within the problem-oriented policing community on creative responses (see Appendix A: Goldstein Award judging criteria). This can create a tension between the introduction of alternative frames and the integration of traditional and alternative responses.

In both phases of the research I found support for the assumption that multiple frames can be used to describe a problem in problem-oriented policing (Allison, 1969; Kahneman, 2011). This is true for both the problem definition and response phase of a project. However, the use of

multiple frames is greater during the problem response phase, where combinations of both traditional and alternative response frames are introduced in an effort to handle different aspects of a problem.

Although alternative response frames are introduced in both phases of POP projects, I found that officers are more likely to select traditional response frames over alternative responses. The most commonly used response frames in the content analysis were traditional policing and enforcement and crime prevention education. In the survey, I found that a handful of alternative frames were used to describe problems. However, in two of the three vignettes, traditional policing and crime prevention were used considerably more often than the alternative response frames.

While departments conducting problem-oriented policing projects are encouraged to move away from business as usual (i.e. only using traditional frames), some appear to be uncomfortable with such a change in their work. This was the finding twenty years ago in the research of Cordner and Biebel (1995), ten years ago with Bichler and Gaines (2005) and continues to be the case today. Over the past 30 years, officers have generally become more aware of the concept of problem-oriented policing (Lum et al., 2012). Unfortunately, many are still unsure as to how POP is different from their normal problem response. As we encourage officers engaged in problem-oriented policing to conduct more extensive scanning and analysis activities and to search out a variety of alternative responses, we also need to show them how to integrate alternative framing with their traditional responses. Simply telling these officers to seek out creative responses is not enough to change how they approach their work. It is also important to provide officers with examples of the benefits of alternative responses, such as the fact that some alternative responses can use fewer resources than traditional responses.

One of the ways to improve officers' understanding of how to apply alternative frames is to provide them with more examples of how different problem frames might contribute to more or less effective responses. Examples of the frames used in projects that are identified both as successes and failures (per the project goals) may help officers to better understand how problem framing influences POP projects.

4. Differences between the Framing Activities of Finalists and Sample Segments

This research showed that there are clear differences between the finalist and sample segments. Finalists do indeed provide stronger examples of problem framing activities than do the cases that are in the general samples. It is unknown whether this finding is due to a subconscious preference by the judges for projects with more extensive problem framing or because stronger problem framing leads to stronger problem-oriented policing projects. The finalist cases are much more likely to have a frame applied to the problem definition during the scanning and analysis phase (78.6% of finalists are framed versus 53.5% of the sample cases). Further, alternative frames are more likely to be used in combination with traditional frames by finalists than by the sample segments. In 87.5% of the finalist cases where a traditional frame was introduced, an alternative response frame was also introduced. In contrast, alternative frames were used in combination with traditional frames in 69.1% of the general sample cases. And, a frame that is used during the scanning and analysis phase is more likely to also be used in the response for finalists than for the general sample segments (43.9% of the finalists versus 22.5% of sample cases).

If the finalists for the awards are supposed to be representative of more successful problem-oriented policing efforts, then we can tentatively suggest that the use of more and alternative frames is associated with better POP projects. Whether this is due to causation or

correlation is currently unknown. The current research does not evaluate how problem framing activities are linked with the goals of a project. However, this issue could be explored with further research on the frames that are used in projects that have been identified as successful (whatever the measure of success). Such work could help to identify the range and types of problem framing activities that are optimal.

Similarities Among Goldstein and Tilley Award Segments

While there are clear differences between the finalists and sample segments, I found few differences between the Goldstein and Tilley groups. Prior to this research there were no studies that examined submissions to both awards. In the present sample, there are not strong and consistent differences between the frames that are used in the submissions to the two awards, beyond those that are encouraged by national mandates or judging criteria (e.g. the use of routine activities theory and the involvement of partners in projects in the UK). Although the Tilley candidates are more likely to use routine activities theory as a problem definition frame, the Goldstein submissions are more likely to use a wider pool of potential frames for both the scanning/analysis and responses phases of projects (see Tables 9 and 10). These differences appear to balance each other and could be a reflection of the samples selected. This finding is somewhat surprising due to the increased national emphasis on problem-oriented policing that is found in the UK, in contrast to the US. Such an emphasis has led to some discussion that problem-oriented policing is stronger in the UK than in the US. However, it appears that even with national mandates about POP, there is still evidence of both weak and strong efforts in problem-oriented policing within a country.

5. Lack of Differences over Time and Among Respondents

I began this work with the assumptions that 1) as awareness of problem-oriented policing increased, so to would the use alternative problem frames and 2) differences among POP officers would influence their use of problem frames. These assumptions were based on the prior research that I highlighted in Chapter 4. However, in the two phases of my research, I found no strong temporal or demographic differences or changes associated with problem framing.

I conducted a temporal analysis of the frames used from 2000 through 2009 to determine if there were changes for the general sample and then also for the individual sample segments (see Tables 15 through 17 and Appendix G). Although officers are reported to have became increasingly aware of problem-oriented policing during that period (Lum et al., 2012), the analysis revealed no strong temporal trends in problem framing. In the content analysis, I documented an increase in the use of three S/A frames: routine activities, hot spots of crime, and CPTED. However, the increase in the routine activities frame was the only strong increase and its use could be explained by the change in submission requirements for the Tilley Award. In the response phase, there was a slight increase in the use of the crime prevention frame over time for all segments of the analysis. Throughout the entire review period, however, crime prevention was one of the most popular response frames. The increased used in crime prevention did not occur with any other changes in frame usage. Overall, the changes over time were relatively mild and did not suggest great changes in thinking about problem frames.

I also examined the characteristics of the survey respondents to determine if any particular individual characteristics were influencing the results (see Appendix H). There were no strong trends due to gender, education, rank, agency size, or prioritization of POP within an agency that strongly influenced the framing results. While I did not find any strong demographic

trends among officers in the current work, this could be due to limitations with the current research sample. This includes limitations associated with a small, specific sample, a brief survey, and the lack of a control group. Future research may help to tease out whether these findings are indeed sample specific or if they are representative of the greater field. Research examining a larger group of POP officers might identify demographic variables that are associated with the use of certain types of problem frames. Research in this area could also be conducted with a control group of traditional police officers to determine if POP officers frame problems in a different manner than officers who are not involved in problem-oriented policing. This work could help agencies to better tailor 1) the teams assigned to work on problem-oriented policing projects and 2) the training of officers on problem-oriented policing.

6. Descriptors and Prescriptors

Some frames are useful to define and describe problems and other frames are useful to guide the responses for those problems. Among the projects examined in the content analysis, teams are most likely to use alternative frames like routine activities theory, hot spots of crime, and broken windows to define and describe problems (scanning and analysis). These three frames are very good at describing the nature of a problem, but they are not associated with specific and quick response activities. In the response phase of the content analysis projects, projects are most likely to be framed by traditional responses, most commonly traditional policing and crime prevention education. These are responses that allow officers to undertake immediate action. In fact, traditional responses may be representative of the overconfidence in knowledge calibration bias (Stanovich, 1999). These responses are the ones that officers are most familiar with and thus they seem more appropriate as a response, even when other theoretically useful, but technically unfamiliar, responses are available.

Following the traditional responses, project teams then turn to action-oriented alternative response frames. The most commonly used alternative response frames are CPTED, at-risk treatment, and situational crime prevention. Both CPTED and situational crime prevention are closely linked with specific prescriptions for response (e.g. increasing surveillance via CPTED or the five techniques of situational crime prevention). Similarly, the first response activity associated with an at-risk treatment frame is to involve local social service providers and schools in the response efforts, rather than conducting a pure law enforcement response. All three of these frames provide for specific and quickly implemented response activities. Thus, while problem definitions may be thoughtful descriptions, it is clear that there is a preference for action-oriented prescriptions for problems.

An example of this descriptive versus prescriptive finding in action can be shown with routine activities theory. When a routine activities approach is used to define and describe a problem, the project team focuses on the offenders, victims, and places associated with crimes. Although the ideal POP project may encourage a holistic approach to problems and be able to integrate responses for all three elements in routine activities theory, real world limitations may hinder such a response. Additionally, a full routine activities response may appear to take too long to develop or to implement. As a result, in the response phase, the project team may not use a true routine activities response. Instead, they may choose to deal with only one element of the crime triangle (place, offender, or victim). In such an instance, the project team may choose to focus on providing crime prevention education to potential victims or providing alternatives to crime for at-risk youth. These responses are quick and demonstrate to the public that the police are doing something about the problem. In the content analysis, we saw that both crime

prevention education and at-risk treatment and services were popular response frames that were used when a routine activities theory frame was used to define and describe a problem.

As we train officers about alternative approaches associated with problem-oriented policing it is important to provide them with examples of how to translate the theories into action. Some theories of criminology may serve as useful descriptors of a problem, but may not be easily linked to responses. While my findings suggest that officers are becoming increasingly aware of the language associated with alternative problem frames, they may not necessarily understand what to do with them. It is also possible that officers are becoming aware that they should talk about alternative problem frames, even if they have no intention of using the alternative frames in their responses. Either way, officers involved in problem-oriented policing are relying on traditional responses too much. These officers need to be provided with a better understanding of the criminological theories that both explain crime and provide prescriptions for action. Policing is a results-focused field; without an understanding of how to use a theoretical frame to treat a crime problem, the theory is largely useless. Further, if the officers do not find ways to connect with alternative theories, so that they are more comfortable with them, they will continue to seek out the responses with which they are most familiar.

7. Problem Definition Frames Indirectly Guide Problem Responses

Previous research on problem framing strongly suggests that the way that problem-solvers frame a problem will influence the response (Fagley & Miller, 1990; Tversky & Kahneman, 1986). There are two ways that a problem definition can be shown to be connected to a problem response. First, the problem definition frame may also be used as a problem response frame. Second, certain problem definition frames can be linked to groups of other

response frames. In the present work, I found that the second option appears to be a better explanation for how problem definitions are linked to problem responses.

The descriptors and prescriptors distinction highlighted in the previous section is an example of this finding. In the previous example, I noted that a routine activities frame during the problem definition may lead to an offender-focused or victim-focused frame being used in the response. Although a project may be defined in terms of all three sides of the problem triangle (offender, victim, and place), the project team may choose to focus on just one element, rather than all three. Such a decision could explain why a project team would be more likely to use a CPTED focus or an effort to intervene with members of the community who may be at-risk for future offending more often than the three-pronged routine activities response. This finding also hints that project teams are focusing more on small, quick, achievable wins, rather than undertaking efforts that focus on the entire problem (Weick, 1984). There may be a variety of reasons for this choice, but limitations of time, manpower, and money are likely involved.

I also found that the problem definition frames in the surveys were more likely to be indirectly linked to the response frames than in the content analysis. In the survey results we saw examples where situational crime prevention (vignette 1) and defensible space (vignette 2) were the most frequently used problem definition frames and then CPTED, a similar frame, was one of the more frequently used response frames for each of the vignettes.

In order to better understand this indirect link between descriptors and prescriptors it would be useful for academics to further study the frames that can be linked together from problem definition to response. We know that there is a great deal of overlap among the alternative problem frames used in problem-oriented policing. It would be useful to extend the initial clustering work that I began in this research (see Figures 6-8 and F1-F5) to develop a more

thorough understanding of the frames that are likely to be linked together and why. The results of this work would help officers to better understand how certain problem descriptions could be linked to problem prescriptions for successful crime reduction.

8. Limited Scanning and Analysis Leads to an Increase in Traditional Response Frames

In both phases of the research there is evidence that a failure to identify a frame during the problem definition phase of a project is associated with the use of a traditional response frame. In the content analysis, 38% of the cases in the sample do not introduce an S/A frame. In 87% of those cases, a traditional response frame is a part of the total response package. In 42% of those cases, traditional response frames are the only response frames that are applied to the problem. Among the survey respondents, failure to provide a problem frame to define the problem led to the use of a traditional response frame (traditional policing or crime prevention) in a majority of responses for the first and second vignettes and half of the responses for the third vignette.

These findings suggest that the lack of a problem definition frame can contribute to a lack of alternative frames being introduced in problem responses. In such instances, it appears that crime incidents remain as just incidents and don't become elevated to the level of crime problems as defined by Goldstein (1990). The incidents are not viewed as part of a larger group of connected concerns or representative of some greater crime concept or theory of crime. And, when officers in the sample believe that they are working merely with crime incidents, then they primarily respond with the traditional response activities. Although the projects might be labeled as problem-oriented policing projects, the responses to the incidents strongly suggests that they have not been elevated beyond typical police business in the minds of the responding officers.

In these situations, officers need to remember how crime problems are different from individual crime incidents. We then need to return to the recommendation for the first statement about problem framing and problem-oriented policing: officers need to be reminded to conduct thorough scanning and analysis exercises and then search out a variety of response alternatives. Such activities should then increase the potential group of response frames used by officers.

9. Problem Definition Content and Length Influences Response Frames

The failure to frame a problem definition is linked to the increased use of traditional response frames. However, there appear to be different reactions when the failure to frame a problem definition is linked to a brief problem description versus a vague problem description. Vignettes 2 and 3 in the survey were specifically primed to provoke different responses from the survey participants, in a manner reminiscent of Groff and colleagues' (2005) use of different maps and statistics to tell the same story.

Vignette 2 in the survey deliberately provided a lengthy description of a community problem, but that information was arbitrary and the specific problem description was vague. In this instance the majority of respondents selected traditional policing and crime prevention education as their primary response frames, but then also introduced ten different alternative response frames as part of the response package.

In contrast, the third survey vignette was also vague, but briefly stated in one sentence. In this instance 75% of the respondents specifically noted in their comments that more scanning and analysis was needed to identify the true nature of the problem (which they failed to suggest in vignette 2). Further, only three response frames were cited by respondents. Traditional policing and crime prevention education were two of the three responses.

Taken as a whole, these results demonstrate a core belief that has developed in problem-oriented policing: weak or limited scanning and analysis efforts limit the ability to craft targeted responses to crime problems (Clarke, 1997; Graziano et al., 2013; Scott, 2000). When problem definitions are vague, project teams are unsure how to frame their problem responses and will most commonly incorporate traditional responses into their work. If these teams have vaguely defined problems, but have an overwhelming amount of data, they may turn to kitchen sink-style approaches to problem-solving. Due to the overload of information, they are not comfortable providing a specific definition for the problem. However, they may see that a number of different response frames could be appropriate, resulting in a diluted effort. In contrast, if the problems are vaguely defined and there is little data and analysis, then the search for alternative responses is also limited. Both of these problems point to the need for extensive, detailed, and useful descriptions of problems in order to be able to frame problem definitions and develop targeted alternative response frames.

Other Directions for Future Research in Problem-Oriented Policing

In addition to the recommendations for future research noted above, there are two general areas that we might explore with future research on problem framing in problem-oriented policing. First, we can turn to more formal grounded theory methods to continue to improve our understanding of how officers use problem framing in problem-oriented policing. The grounded theory method works in the reverse order of traditional hypothesis testing. Rather than beginning with a hypothesis about how something works, grounded theory method begins with data collection. After several iterations of data collection, a theory slowly emerges. Such a method is appropriate in the current work because there are so many unknown elements about framing within problem-solving and problem-oriented policing. The research presented in this

dissertation can be viewed as the first round of data collection. Future rounds of data collection will focus more sharply on how specific frames might be used or the links between certain problem definition and problem response frames. All of this work will allow for the development of a more precise theory about problem framing in problem-oriented policing.

A second line of research should focus on first-person observation of problem framing in problem-oriented policing projects. The current research examined after-the-fact reports of POP projects submitted for an award and survey responses of POP officers. While this data is currently the best available resource to study a group of POP projects and officers, it may not be the best record of how a project officer or team actually conducts framing activities during a problem-oriented policing project. Someone who has access to multiple agencies conducting problem-oriented policing projects could monitor the progress of project teams to document the frames that are both considered and used during POP projects.

Training of Officers Engaged in Problem-Oriented Policing

In this chapter I highlighted some of the areas where it would be possible to improve the training of officers about problem framing in problem-oriented policing. The amount of training that an officer receives in problem-solving, problem-oriented policing, or theories of environmental criminology before he is first tasked with a POP project varies considerably, both among and within police departments. While it would be ideal to establish firm training protocols for all officers engaged in POP, this is not realistic. At a minimum, agencies, academies, and other groups that conduct trainings on problem-oriented policing should emphasize two particular points to contribute to an improvement in problem framing activities.

The first point of emphasis is the importance of faithfully carrying out the SARA process. This is particularly focused on conducting thorough scanning and analysis exercises and

considering a wide variety of alternative responses. When project teams place an increased emphasis on these elements, enhanced problem framing activities should be the natural result.

The second point of emphasis should be placed on the influence of problem framing on problem-solving. Problem framing is an integral, yet largely hidden, part of problem-oriented policing. Officers need to better understand the influence of problem framing on problem-solving. Even at a basic level, such an understanding might help officers to better grasp why following a problem-solving model like SARA is so important for achieving the goals of a POP project.

Conclusions

In this work I have presented background on the fields of problem framing and problem-oriented policing in an attempt to demonstrate the importance of the first to the second. I then conducted a two- piece mixed methods research study to begin to understand the state of problem framing in problem-oriented policing. This work provides us with some tentative conclusions about problem framing among the sample groups.

The research conducted here shows that both traditional and alternative problem framing is occurring in problem-oriented policing projects and by problem-oriented policing officers. However, some project teams and individual officers have difficulty introducing problem frames during the problem definition phase of a project and then integrating traditional and alternative response frames in the development of a response to the problem.

It is important to remember that this work is the first effort to systematically examine problem framing in problem-oriented policing. Despite the limitations of the current research, there are two groups of findings that are of particular importance as we consider the future of problem-oriented policing. The first important finding is related to the use of alternative frames

as descriptors versus prescriptors. This finding suggests that while officers involved in problem-oriented policing are aware of alternative problem frames and can use them to describe problems, they continue to fall back on traditional response frames. Current training efforts do not appear to be effective in teaching officers about how to integrate alternative framing efforts into their problem responses. The second important finding is related to the influence of the problem definition content and length on problem framing. This finding is supportive of previous discussion and research that suggests that weak problem scanning and analysis leads to weak responses (Clarke, 1997; Graziano et al., 2013; Scott, 2000). The survey results provide greater context for the previous discussion, suggesting that whether the problem is briefly defined or vaguely defined can impact the development of responses in different ways.

As a whole, the findings from this research both support previous work on the limitations of problem-oriented policing while also identifying potential explanations for why those limitations exist. The results then provide us with several directions for 1) improvements in problem-oriented policing and 2) future exploration of problem framing and problem-oriented policing. This work could help to further specify the source of current weaknesses in the implementation of problem-oriented policing as well as test for ways that changes in problem framing could strengthen the process. Both avenues of work will contribute to the ultimate goal of this research: to improve problem framing within problem-oriented policing to advance the overall effectiveness of police work.

References

---. (2010, December 27). No love for Cincinnati nuisance landlord law. *Associated Press.* Retrieved from http://archive.wkyc.com/news/story.aspx?storyid=166165 on 30 August 2013.

Allison, G. T. (1969). Conceptual models and the Cuban Missile Crisis. *The American Political Science Review, 63*(3), 689-718.

Allison, G. T. (1971). *Essence of decision: Explaining the Cuban Missile Crisis*. Boston, MA: Little, Brown & Co.

Antunes, G. & Scott, E. J. (1981). Calling the cops: Police telephone operators and citizen calls for service. *Journal of Criminal Justice, 9*(2), 165-180.

Bichler, G. & Gaines, L. (2005). An examination of police officers' insights into problem identification and problem-solving. *Crime & Delinquency, 51*(1), 53-74.

Bittner, E. (1970). *The functions of the police in modern society: A review of background factors, current practices, and possible role models.* Bethesda, MD: National Institute of Mental Health.

Bless, H., Betsch, T. & Franzen, A. (1998). Framing the framing effect: The impact of context cues on solutions to the 'Asian disease' problem. *European Journal of Social Psychology, 28*(2), 287-291.

Boba, R. (2003). *Problem analysis in policing*. Washington, DC: Police Foundation and U.S. Department of Justice, Office of Community-Oriented Policing.

Boba, R. & Crank, J. P. (2008). Institutionalizing problem-oriented policing: Rethinking problem-solving, analysis, and accountability. *Police Practice and Research, 9*(5), 379-393.

Bracken, P. & Shubik, M. (2001). War gaming in the information age: Theory and purpose. *Naval War College Review, 54*(2), 47-60.

Braga, A. A. (2010a). *Problem-oriented policing and crime prevention.* Boulder, CO: Lynne Rienner Publishers.

Braga, A. A. (2010b). Setting a higher standard for the evaluation of problem-oriented policing initiatives. *Criminology & Public Policy,* (9), 173–182.

Braga, A. A. & Weisburd, D. (2006). Problem-oriented policing: The disconnect between principles and practice. In D. Weisburd, & A. A. Braga (Eds.), *Police innovation: Contrasting perspectives* (pp. 133-152). Cambridge, UK: Cambridge University Press.

Bullock, K. (2007). *Lost in translation: An examination of the implementation of problem-oriented policing.* (Unpublished Doctoral Dissertation). University College London, London, UK.

Bullock, K., Erol, R. & Tilley, N. (2006). *Problem-oriented policing and partnerships.* Cullompton, Devon, UK: Willan Publishing.

Bynum, T. (2001). *Using analysis for problem-solving: A guidebook for law enforcement*. Washington, DC: U.S. Department of Justice, Office of Community Oriented Policing Services.

Capowich, G. & Roehl, J. (1994). Problem-oriented policing: Actions and effectiveness in San Diego. In D. P. Rosenbaum (Ed.), *The challenges of community policing: Testing the promises* (pp. 127-146). Thousand Oaks, CA: Sage Publications.

Clarke, R. V. (1997). *Problem-oriented policing and the potential contribution of criminology*. Washington, DC: U.S. Department of Justice, National Institute of Justice.

Clarke, R.V. (1998). Defining police strategies: Problem-solving, problem-oriented policing, and community-oriented policing. In T. O'Connor Shelley & A.C. Grant (Eds.), *Problem-oriented policing: Crime-specific problems, critical issues, and making POP work.* Washington, DC: Police Executive Resarch Forum.

Clarke, R. V. & Goldstein, H. (2003). Thefts from cars in center-city parking facilities: A case study in implementing problem-oriented policing. In J. Knutsson (Ed.), *Problem-oriented policing: From innovation to mainstream. Crime Prevention Studies, Vol. 15* (pp. 257-298). Monsey, NY: Criminal Justice Press.

Cohen, L. E. & Felson, M. (1979). Social change and crime rate trends: A routine activity approach. *American Sociological Review, 44*, 588-608.

Cordner, G. (1988). Problem-oriented approach to community-oriented policing. In J. R. Greene, & S. D. Mastrofski (Eds.), *Community policing: Rhetoric or reality (*pp 135 -152). Westport, CT: Praeger Publishers.

Cordner, G. & Biebel, E. P. (2005). Problem-oriented policing in practice. *Criminology & Public Policy, 4*, 155-180.

Cornish, D. & Clarke, R. (1987). Understanding crime displacement: An application of rational choice theory. *Criminology, 25*(4), 933-947.

Cornish, D. B. & Clarke, R. V. (2003). Opportunities, precipitators and criminal decisions: A reply to wortley's critique of situational crime prevention. In M. J. Smith, & D. B. Cornish (Eds.), *Theory for practice in situational crime prevention, Crime Prevention Studies, Vol. 16* (pp. 41-96). Monsey, NY: Criminal Justice Press.

De Martino, B., Kumaran, D., Seymour, B. & Dolan, R. J. (2006). Frames, biases, and rational decision-making in the human brain. *Science, 313*(5787), 684-687.

DeJong, C., Mastrofski, S. D. & Parks, R. B. (2001). Patrol officers and problem-solving: An application of expectancy theory. *Justice Quarterly, 18*(1), 31-61.

Druckman, J. N. (2001). Evaluating framing effects. *Journal of Economic Psychology, 22*(1), 91-101.

Eagleman, D. (2011). *Incognito: The secret lives of brains.* New York, NY: Pantheon Books.

Eagly, A. H. & Chaiken, S. (1993). *The psychology of attitudes*. Fort Worth, TX: Harcourt Brace Jovanovich College Publishers.

Eck, J. E. (2002). Learning from experience in problem-oriented policing and situational prevention: The positive functions of weak evaluations and the negative functions of strong ones. *Evaluation for crime prevention, Crime Prevention Studies, Vol. 14* (pp. 93-117). Monsey, NY: Criminal Justice Press.

Eck, J. E. (2003). Police problems: The complexity of problem theory, research, and evaluation. In J. Knutsson (Ed.), *Problem-oriented policing: From innovation to mainstream, Crime Prevention Studies, Vol. 15* (pp. 79-113). Monsey, NY: Criminal Justice Press.

Eck, J. E. (2004). Why don't problems get solved? In W. G. Skogan (Ed.), *Community policing: Can it work?* (pp. 185-206). Belmont, CA: Wadsworth Publishing Co.

Eck, J. E. (2006). Science, values, and problem-oriented policing: Why problem-oriented policing? In D. Weisburd, & A. A. Braga (Eds.), *Police innovation: Contrasting perspectives* (pp. 117-132). Cambridge, UK: Cambridge University Press.

Eck, J. E. & Clarke, R. V. (2003). Classifying common police problems: A routine activity approach. In M. J. Smith, & D. B. Cornish (Eds.), *Theory for practice in situational crime prevention, Crime Prevention Studies, Vol. 16* (pp. 7-40). Monsey, NY: Criminal Justice Press.

Eck, J. E., Clarke, R. V. & Guerette, R. T. (2007). Risky facilities: Crime concentration in homogenous sets of establishments and facilities. In K. Bowers, & S. D. Johnson (Eds.), *Crime Prevention Studies, Vol. 21* (pp. 225-264.). Monsey, NY: Criminal Justice Press.

Eck, J. E. & Madensen, T. D. (2012). Situational crime prevention makes problem-oriented policing work. In N. Tilley, & G. Farrell (Eds.), *The reasoning criminologist: Essays in honour of Ronald V.G.Clarke* (pp. 80-92). New York, NY: Routledge.

Eck, J. E., Spelman, W., Hill, D., Stephens, D., Stedman, J. & Murphy, G. (1987). *Problem-solving: Problem-oriented policing in Newport News.* Washington, DC: Police Executive Research Forum; U.S. Department of Justice, National Institute of Justice.

Eck, J. E. & Spelman, W. (1987). Who ya gonna call? The police as problem-busters. *Crime & Delinquency, 33*(1), 31-52.

Ekblom, P. (2005). The 5I's framework: Sharing good practice in crime prevention. In E. Marks, A. Meyere & R. Linssen (Eds.), *Quality in crime prevention* (pp. 55-84). Hanover, Germany: Landespraventionsrat Niedersachen.

Engel, R. S. & Worden, R. E. (2003). Police officers' attitudes, behavior, and supervisory influences: An analysis of problem-solving. *Criminology, 41*(1), 131-166.

Entman, R. M. (1993). Framing: Toward clarification of a fractured paradigm. *Journal of Communication, 43*, 51-58.

Fagley, N. S. & Miller, P. M. (1990). The effect of framing on choice: Interactions with risk-taking propensity, cognitive style, and sex. *Personality and Social Psychology Bulletin, 16*(3), 496-510.

Fairhurst, G. T. (2005). Reframing *The Art of Framing*: Problems and prospects for leadership. *Leadership, 1*, 165-185.

Farrell, G. & Pease, K. (1993). *Once bitten, twice bitten: Repeat victimisation and its implications for crime prevention. Crime Prevention Unit Paper 46.* London, England: Home Office.

Farrell, G., Tseloni, A. & Pease, K. (2005). Repeat victimization in the ICVS and the NCVS. *Crime Prevention and Community Safety: An International Journal, 7*(3), 7-18.

Gladwell, M. (2005). *Blink: The power of thinking without thinking.* New York, NY: Little, Brown and Company.

Goffman, E. (1974). *Frame analysis: An essay on the organization of experience.* Cambridge, MA: Harvard University Press.

Goldstein, H. (1979). Improving policing: A problem-oriented approach. *Crime & Delinquency, 25*(2), 236-258.

Goldstein, H. (1990). *Problem-oriented policing.* New York, NY: McGraw Hill.

Goldstein, H. (2003). On further developing problem-oriented policing: The most critical need, the major impediments, and a proposal. In J. Knutsson (Ed.), *Problem-oriented policing: From innovation to mainstream, Crime Prevention Studies, Vol 15* (pp. 13-47). Monsey, NY: Criminal Justice Press.

Goldstein, H. & Susmilch, C. E. (1981). *The problem-oriented approach to improving police service: A description of the project and an elaboration of the concept. Vol. 1 of the Project on Development of a Problem-Oriented Approach to Improving Police Service*. Madison, WI: University of Wisconsin Law School.

Graziano, L. M., Rosenbaum, D. P. & Schuck, A. M. (2013). Building group capacity for problem-solving and police-community partnerships through survey feedback and training: A randomized control trial within Chicago's community policing program. *Journal of Experimental Criminology, Published online*, 1-25.

Grinder, D. (2000). Implementing problem-oriented policing: A view from the front lines. In C. S. Brito, & E. E. Gratto (Eds.), *Crime-specific problems, critical issues, and making POP work, Problem-Oriented Policing, Vol. 3* (pp. 141-156). Washington, DC: Police Executive Research Forum.

Groff, E. R., Kearley, B., Fogg, H., Beatty, P., Couture, H. & Wartell, J. (2005). A randomized experimental study of sharing crime data with citizens: Do maps produce more fear? *Journal of Experimental Criminology, 1*(1), 87-115.

Hardin, A. M. & Looney, C. A. (2012). Myopic loss aversion: Demystifying the key factors influencing decision problem framing. *Organizational Behavior and Human Decision Processes, 117*(2), 311-331.

Hassell, K.D. & Lovell, R.D. (2014). Fidelity of implementation: Important considerations for policing scholars. *Policing and Society,* DOI: 10.1080/10439463.2014.881811. Retrieved February 15, 2014, from http://www.tandfonline.com/doi/abs/10.1080/10439463.2014.881811#.UyCoKs7FnWJ

Henson, N. (2013). PARTNERS: Partnership problem-solving process. Retrieved August 1, 2013, from http://www.sixthsensetraining.co.uk/forms/PARTNERS-Problem-Solving-Process-Sixth-Sense.pdf

Ikerd, T. E. (2010a). Beyond "flavor of the month:" Institutionalizing problem-oriented policing (POP) in the CMPD. *Policing, 33*(1), 179-202.

Ikerd, T. E. (2010b). Putting POP to the pavement: Captains in the Charlotte-Mecklenburg police department share their experiences. *Police Practice & Research, 11*(6), 491-504.

Iyengar, S. (1991). *Is anyone responsible? How television frames political issues*. Chicago, IL: The University of Chicago Press.

Iyengar, S. (1996). Framing responsibility for political issues. *Annals of the American Academy, 546*, 59-70.

Jeffery, C. R. (1971). *Crime prevention through environmental design.* Beverly Hills, CA: Sage Publications.

Kahneman, D. (2011). *Thinking, fast and slow*. New York, NY: Farrar, Straus and Giroux.

Kahneman, D. & Klein, G. (2009). Conditions for intuitive expertise: A failure to disagree. *American Psychologist, 64*(6), 515-526.

Kahneman, D. & Tversky, A. (2000). *Choices, values, and frames*. Cambridge, UK: Cambridge University Press.

Kennedy, D. M. (1997). Pulling levers: Chronic offenders, high-crime settings, and a theory of prevention. *Valparaiso University Law Review, 31*(2), 449-484.

Knutsson, J. (2003). Introduction. In J. Knutsson (Ed.), *Problem-oriented policing: From innovation to mainstream, Crime Prevention Studies, Vol 15* (pp. 1-11). Monsey, NY: Criminal Justice Press.

Konig, T. (2013). Frame analysis. Retrieved September 10, 2013, from www.ccsr.ac.uk/methods/publicatons/frameanalysis/

Laycock, G. (2005). Defining crime science. In M. J. Smith, & N. Tilley (Eds.), *Crime science: New approaches to preventing and detecting crime* (pp. 3-24). Devon, UK: Willan Publishing.

Lipsky, M. (1980). *Street-level bureaucracy: Dilemmas of the individual in public services*. New York, NY: Russell Sage Foundation.

Lord, V. B. & Friday, P. C. (2008). What really influences officer attitudes toward COP? The importance of context. *Police Quarterly, 11*(2), 220-238.

Lum, C., Telep, C., Koper, C. & Grieco, J.. (2012). Receptivity to research in policing. *Justice, Research and Policy 14(1), 61-95.*

Madensen, T. D. & Eck, J. E. (2008). Violence in bars: Exploring the impact of place manager decisionmaking. *Crime Prevention and Community Safety, 10*(2), 111-125.

McNulty, E. W. (1994). Generating common sense knowledge among police officers. *Symbolic Interaction, 17*(3), 281-194.

Newman, O. (1972). *Defensible space: Crime prevention through urban design.* New York, NY: MacMillan.

Nickerson, R. S. (1998). Confirmation bias: A ubiquitous phenomenon in many guises. *Review of General Psychology., 2*(2), 175-220.

Paoline III, E. A. (2003). Taking stock: Toward a richer understanding of police culture. *Journal of Criminal Justice, 31*(3), 199-214.

Payne, T. C., Gallagher, K., Eck, J. E. & Frank, J. (2013). Problem framing in problem-solving: A case study. *Policing: An International Journal of Police Strategies and Management, 36*(4), 670-682.

Pepinsky, H. E. (1976). Police patrolmen's offense-reporting behavior. *Journal of Research in Crime and Delinquency, 13*(1), 33-47.

Phillips, S. W. (2009). Using a vignette research design to examine traffic stop decision making of police officers: A research note. *Criminal Justice Policy Review, 20*(4), 495-506.

Piliavin, I. & Briar, S. (1964). Police encounters with juveniles. *American Journal of Sociology, 70,* 206-214.

POPCenter.org (2013). Center for Problem-Oriented Policing website. Retrieved 1 October, 2013 from: http://www.popcenter.org/casestudies/.

Quinton, P. (2011). *The impact of information about crime and policing on public perceptions: The results of a randomised controlled trial*. London, UK: National Policing Improvement Agency.

Read, T. & Tilley, N. (2000). *Not rocket science: Problem-solving and crime reduction. Crime Reduction Research Series*. London, UK: British Home Office.

Redelmeier, D. A. & Tversky, A. (1992). On the framing of multiple prospects. *Psychological Science, 3*(3), 191-193.

Robertson, L. S. (2007). *Injury epidemiology: Research and control strategies.* New York, NY: Oxford University Press.

Robertson, S. I. (2001). *Problem-solving*. Philadelphia, PA: Psychology Press.

Rojek, J. (2003). A decade of excellence in problem-oriented policing: Characteristics of the Goldstein award winners. *Police Quarterly, 6*(4), 492-515.

Rossmo, D.K. (Ed.). (2009). *Criminal investigative failures*. Boca Raton, FL: CRC Press.

Rothstein, H. R. (2008). Publication bias as a threat to the validity of meta-analytic results. *Journal of Experimental Criminology, 4*, 61-81.

Scheufele, D. (1999). Framing as a theory of media effects. *Journal of Communication, 49*(1), 103-122.

Scott, M. S. (2000). *Problem-oriented policing: Reflections on the first 20 years.* Washington, DC: U.S. Department of Justice, Office of Community Oriented Policing.

Scott, M. S. (2003). Getting the police to take problem-oriented policing seriously. In J. Knutsson (Ed.), *Problem-oriented policing: From innovation to mainstream, Crime Prevention Studies, Vol 15* (pp. 49-77). Monsey, NY: Criminal Justice Press.

Scott, M. S. (2006). Implementing crime prevention: Lessons learned from problem-oriented policing projects. In J. Knutsson, & R. V. Clarke (Eds.), *Putting theory to work: Implementing situational prevention and problem-oriented policing, Crime Prevention Studies, Vol 20* (pp. 9-35). Boulder, CO: Lynne Reinner Publishers.

Scott, M. S. & Clarke, R. V. (2000). A review of submissions for the Herman Goldstein Award for excellence in problem-oriented policing. In C. S. Brito, & E. E. Gratto (Eds.), *Problem oriented policing: Crime-specific problems, critical issues, and making POP work* (pp. 213-230). Washington, DC: Police Executive Research Forum.

Sealock, M. D. & Simpson, S. S. (1998). Unraveling bias in arrest decisions: The role of juvenile offender type-scripts. *Justice Quarterly, 15*(3), 427-457.

Shaddish, W. R., Cook, T. D. & Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference*. Boston, MA: Houghton Mifflin Company.

Sherman, L., Gartin, P. & Buerger, M. (1989). Hot spots of predatory crime. *Criminology, 27*(1), 27-56.

Sherman, L. Gottfredson, D., Mackenzie, D., Eck, J., Reuter, P. & Bushway, S. (1997). *Preventing crime: What works, what doesn't, and what's promising. A report to the United States Congress.* Washington, DC: U.S. Department of Justice.

Sidebottom, A. & Tilley, N. (2011). Improving problem-oriented policing: The need for a new model? *Crime Prevention and Community Safety,* (2), 79-101.

Simon, H. A. (1956). Rational choice and the structure of the environment. *Psychological Review, 63*(2), 129-138.

Simon, H.A. (1957). *Models of Man: Social and Rational*. New York, NY: Wiley Publishers.

Simon, H. A. (1972). Theories of bounded rationality. In C. B. McGuire, & R. Radner (Eds.), *Decision and organization* (pp. 161-176). Amsterdam, Netherlands: North-Holland Publishing Company.

Skogan, W. G., Hartnett, S. M., DuBois, J., Comey, J. T., Kaiser, M. & Lovig, J. H. (1999). *On the beat: Police and community problem-solving*. Boulder, CO: Westview Press.

Skolnick, J. (1994). *Justice without trial: Law enforcement in democratic society.* New York, NY: Wiley Publishers.

Son, I. S., Davis, M. S. & Rome, D. M. (1998). Race and its effect on police officers' perceptions of misconduct. *Journal of Criminal Justice, 26*(1), 21-28.

Sparrow, M. (2000). *The regulatory craft: Controlling risks, solving problems, and managing compliance.* Washington, DC: The Brookings Institution.

Stalans, L. J. (2012). Frames, framing effects, and survey responses. In E. L. Gideon (Ed.), *Handbook of survey methodology for the social sciences* (pp. 75-90). New York, NY: Springer.

Stalans, L. J. & Finn, M. A. (1995). How novice and experienced officers interpret wife assaults: Normative and efficiency frames. *Law & Society Review, 29*(2), 287-322.

Stan, L. (2010). Content analysis. In A. J. Mills, G. Durepos & E. Wiebe (Eds.), *Encyclopedia of Case Study Research* (pp. 226-231). Thousand Oaks, CA: Sage Publications, Inc.

Stanovich, K. E. (1999). *Who is rational? Studies of individual differences in reasoning.* Mahwah, NJ: Erlbaum Associates.

Stanovich, K.E. & West, R. F. (2000). Individual difference in reasoning: Implications for the rationality debate?" *Behavioural and Brain Sciences, 23,* 645–726.

Stubbins, D. & Stubbins, N. (2009). On the horns of a narrative: Judgment, heuristics, and biases in criminal investigation. In D.K. Rossmo (Ed.), *Criminal Investigation Failures* (pp. 99-141). Boca Raton, FL: CRC Press.

Sunstein, C. (2013). *Simpler: The future of government.* New York, NY: Simon and Schuster.

Taleb, N. M. (2004). *Fooled by randomness*. New York, NY: Thompson Texere.

Thaler, R. H. (1985). Mental accounting and consumer choice. *Marketing Science*, *4*, 199-214.

Thaler, R. H. & Sunstein, C. R. (2008.). *Nudge: Improving decisions about health, wealth, and happiness.* New Haven, CT: Yale University Press.

Tilley, N. (2010). Whither problem-oriented policing. *Criminology & Public Policy, 9*, 183–195.

Tilley, N. & Laycock, G. (2014). The police as professional problem solvers. In J. Brown (Ed.), *The future of policing.* (pp. 369-382). Oxon, UK: Routledge.

Tilley, N. & Scott, M. S. (2012). The past, present and future of POP. *Policing: A Journal of Policy and Management, 6*(2), 122-132.

Todd, P. M. (2001). Fast and frugal heuristics for environmentally bounded minds. In G. Gigerenzer, & R. Selton (Eds.), *Bounded rationality: The adaptive tool box.* (pp. 51-70). Cambridge, MA: MIT Press.

Townsley, M., Johnson, S. D. & Pease, K. (2003). Problem orientation, problem-solving and organizational change. In J. Knutsson (Ed.), *Problem-oriented policing: From innovation to mainstream* (pp. 183-212). Monsey, NY: Criminal Justice Press.

Tracy, K. (1997). Interactional trouble in emergency service requests: A problem of frames. *Research on Language and Social Interaction, 30*(4), 315-343.

Tversky, A. & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases. *Science, 185*, 1124-1131.

Tversky, A. & Kahneman, D. (1981). The framing of decisions and the psychology of choice. *Science, 211*(30), 453-458.

Tversky, A. & Kahneman, D. (1986). Rational choice and the framing of decisions. *The Journal of Business, 59*(4), S251-S278.

U.K. Home Office. (2013). Tilley awards. Retrieved 1 December 2013 from: http://205.139.89.196/crime/partnerships/tilley-awards/.

U.S. Department of Justice. (2011). *Law enforcement management and administrative statistics (LEMAS), 2007*. Ann Arbor, MI: Inter-university Consortium for Political and Social Research.

Wartell, J. & Gallagher, K. (2012). Translating environmental criminology theory into crime analysis practice. *Policing: A Journal of Policy and Practice, 6*(4), 377-387.

Webster, B. & Connors, E. F. (1993). Police methods for identifying community problems. *American Journal of Police, 12*(1), 75-100.

Weick, K.E. (1984). Small wins: Redefining the scale of social problems. *American Psychologist, 39*, 40-49.

Weisburd, D. & Eck, J. E. (2004). What can police do to reduce crime, disorder, and fear? *Annals of the American Academy of Political and Social Science, 593*, 42-65.

Weisburd, D. & Neyroud, P. (2011). *Police science: Toward a new paradigm. New perspectives in policing, paper of the second Harvard Executive Session on Policing and Public Safety.* Washington, DC: National Institute of Justice.

Weisburd, D., Telep, C. W., Hinkle, J. C. & Eck, J. E. (2010). Is problem-oriented policing effective in reducing crime and disorder? *Criminology & Public Policy, 9*(1), 139–172.

Weisel, D. L. (2003). The sequence of analysis in solving problems. In J. Knutsson (Ed.), *Crime Prevention Studies, Vol. 15* (pp. 115-146). Monsey, NY: Criminal Justice Press.

Weiss, A. (1997). The communication of innovation in American policing. *Policing: An International Journal of Police Strategies & Management*, *20*(2), 292 – 310.

Wilson, J. Q. & Kelling, G. L. (1982). Broken windows: The police and neighborhood safety. *Atlantic Monthly, 249*, 29-38.

Wolfgang, M. E., Figlio, R. M. & Sellin, J. T. (1972). *Delinquency in a birth cohort*. Chicago, IL: University of Chicago Press.

Worrall, J. L. (2013). The police sixth sense: An observation in search of a theory. *American Journal of Criminal Justice, 38*(2), 306-322.

Appendix A: 2013 Goldstein Entry Requirements and Judging Criteria

Retrieved from: http://www.popcenter.org/goldstein/

Entry Requirements

1. **Summary**: To be considered, each entry must begin with a summary of your project. The summary should be between 300 and 400 words. Begin with the project title, and then, using the four-stage SARA model, explain the nature of the problem addressed, give a brief account of the measures taken, and show results using the most important measures of success. You may use headings and bullet points.
2. **Description**: In **no more than 4,000 words** (approximately 15 pages double-spaced), not including charts, tables and graphs, provide a detailed description of the project *using the following four-step SARA problem-solving model outline*. Submissions exceeding the length limitation will be penalized in the judges' scoring. Although you should cover as many of these questions as are applicable, they are intended to guide you, not to serve as a blueprint for your project description. In any case, tell the story of your POP project. Be aware that the committee is particularly interested in well-presented data, especially at the analysis and assessment stage. All tables, charts, graphs, and photos should be located in the appendices.

   A. Scanning:

   - What was the nature of the problem?
   - How was the problem identified?
   - Who identified the problem (e.g., community, police managers, officers, politicians, press, etc.)?
   - Far more problems are identified than can be explored adequately. How and why was this problem selected from among problems?
   - What was the initial level of diagnosis/unit of analysis (e.g. crime type, neighborhood, specific premise, specific offender group, etc.)?

   B. Analysis:

   - What methods, data and information sources were used to analyze the problem (e.g., surveys, interviews, observation, crime analysis, etc.)?
   - History: How often and for how long was it a problem?
   - Who was involved in the problem (offenders, victims, others) and what were their respective motivations, gains and losses?
   - What harms resulted from the problem?
   - How was the problem being addressed before the problem-solving project? What were the results of those responses?
   - What did the analysis reveal about the causes and underlying conditions that precipitated the problem?
   - What did the analysis reveal about the nature and extent of the problem?
   - What situational information was needed to better understand the problem (e.g., time of occurrence, location, other particulars re: the environment, etc.)?
   - Was there an open discussion with the community about the problem?

C. Response:

- What range of possible response alternatives were considered to deal with the problem?
- What responses did you use to address the problem?
- What, specifically, did you learn from your analysis of the problem that led to your choice of a new response to the problem?
- What evaluation criteria were most important to the department before implementation of the response alternative(s) (e.g., legality, community values, potential effectiveness, cost, practicality, etc.)?
- What did you intend to accomplish with your response plan (i.e., project goal and corresponding measurable objectives)?
- What resources were available to help solve the problem?
- What was done before you implemented your response plan?
- What difficulties were encountered during response implementation?
- Who was involved in the response to your problem?

D. Assessment:

- What were the results? What degree of impact did the response plan have on this problem?
- What were your methods of evaluation and for how long was the effectiveness of the problem-solving effort evaluated?
- Who was involved in the evaluation?
- Were there problems in implementing the response plan?
- If there was no improvement in the problem, were other systemic efforts considered to handle the problem?
- What response goals were accomplished?
- How did you measure your results?
- What data supported your conclusions?
- How could you have made the response more effective?
- Was there a concern about displacement (i.e., pushing the problem somewhere else)?
- Will your response require continued monitoring or a continuing effort to maintain your results?

3. Agency and Officer Information:

- Key Project Team Members
- Project Contact Person. Include:

  Name
  Position/Rank
  Address
  City/State
  Phone
  Fax
  Email

The Judging Process

Once all submissions have been received, a few of the judges screen all the submissions. The screening judges independently read and score each project using the same score sheet used at the conference. The awards coordinator then tallies and ranks the screening judges' scores. Those projects ranked in the top cluster are designated as award finalists and invited to present their project at the conference to determine which will be the winner. This process is completed by mid-July.

At the conference, all the judges watch and score the project presentations. Conference attendees who watch project presentations are invited to score them also, with the average audience score counting as the equivalent of one judge's score. The project with the highest score is the winner. The other projects are deemed finalists, but are not ranked. The judges do not debate or decide collectively which project will be the winner. Only their individual and separate scoring of each project is used to determine the results. The judges base their score both on the written project submission and on the presentation of the project at the conference. The audience members score only on the basis of the conference presentation. The winner of the Goldstein Award will be announced on the last day of the conference.

The winning project's agency will be awarded a trophy, certificates for project team members, and vouchers covering registration fees and travel expenses (airfare and hotel) for three (3) people to attend a future POP Conference, and those projects' agencies selected as finalists will each receive a trophy, certificates for project team members, and vouchers covering registration fees for two (2) people to attend a future POP Conference.

Judging Criteria

All submissions are judged according to a standard set of criteria. The Analysis and Assessment dimensions of the submission are weighted more heavily than the Scanning, Response, and Presentation dimensions.

1. Scanning (Problem Identification)

- evidence that the problem is perceived to be significant to both the police and at least some key constituents in the community
- hard evidence that the problem causes tangible harm (claims about amorphous fear or speculative harm should be discounted)

2. Analysis

- both quantitative and qualitative analyses are conducted, both of which put the scope and seriousness of the problem in appropriate context (i.e., evidence that the problem justifies special attention by the police)
- evidence that the analysis has in fact influenced the way in which the police and others think about and respond to the problem (e.g., the nature and/or significance of the problem is redefined or confirmed)
- the analysis is broad (i.e., many questions from several perspectives are asked and information is drawn from a variety of sources, including at least some literature review)
- the analysis is thorough and of sufficient depth (e.g., the conclusions drawn are compelling on the basis of a detailed analysis presented)

- the analysis is creative (i.e., problem solvers used creative, practical methods to study the problem)

3. Response

- evidence that at least several alternative responses were considered and an explanation as to why some responses were implemented and others not
- the extent to which the new responses were developed as a logical result of specific knowledge gained from the analysis
- an explanation of the nature of the implemented responses and how they were intended to work (if responses that were developed by other police agencies are implemented, list those agencies and explain how your response varies, if at all, from the adopted model)
- the response is balanced, fair, and just (i.e., apportions responsibilities and accountability equitably), consistent with the best principles of democratic policing
- the response is creative (i.e., at least some of the responses to the problem were innovative and not merely applications of responses developed and applied elsewhere)

4. Assessment (Evaluation)

- the impact measures are logically related to the definition of the problem
- both quantitative and qualitative assessments are conducted, both of which provide valid and reliable evidence that the response produced an intended positive impact on the problem (a sufficiently long assessment period to establish that the effect is real and has been sustained)
- several different impact measures are employed (e.g., police reports, time accounting, financial impact, perceptions of the problem)
- the degree of positive impact is high (e.g., the harm was significantly reduced, the response to the problem was significantly improved)
- the response both reduces the harm currently caused by the problem and prevents future harm (i.e., has both immediate and long-term impact)
- evidence that displacement effects have been discovered or considered

5. Presentation

- the narrative is well-written (including grammar, spelling, and organization) and meets the length limitations
- data are presented comprehensibly (e.g., through use of tables, charts, graphs) and other media (e.g., photographs, supporting documents) are employed effectively

Appendix B: 2012 Tilley Award Guidance for Entrants and Judging Criteria

TILLEY AWARDS 2012 - GUIDANCE FOR ENTRANTS
Retrieved from: https://www.gov.uk/government/publications/tilley-awards-2012-application-form-and-guidance

SECTION ONE
BACKGROUND TO AWARDS STRUCTURE, TIMING AND PRIZES PURPOSE OF THIS GUIDANCE

1. This guidance has been written for people considering entering the 2012 Tilley Awards. The guidance has been designed to enable entrants to:

- Decide whether a project is ready to be entered into the awards.
- Put together the best possible application.
- Understand the process for submitting an application form.
- Know what to expect once your entry has been submitted.

2. Please read this guidance very carefully as any application that does not comply with the entry requirements will be rejected from the competition.

3. We want to provide as much help as possible. To this end, any queries about application entries, or the proper procedure to follow should be directed to Darren Kristiansen or Daniel Hesami by email via the Tilley Awards mailbox at TilleyAwards2012@homeoffice.gsi.gov.uk or by telephone on 0207 035 3228 or 0207 035 8973.

4. The Tilley Awards were set up in 1999 by the Home Office to publicise the use of problem-oriented partnership (POP) approaches to crime reduction and what can be achieved by tackling crime in a different and more strategic way. Many local partners adopt problem-solving when faced with problems that has not been tackled using traditional crime fighting methods alone.

5. The Awards focus on a problem-solving crime prevention model known as SARA. This involves **S**canning for problems that are a priority for the local community; **A**nalysing available evidence sources such as local crime data, local intelligence obtained from strategic and delivery partners and feedback from the local community; developing the best **R**esponse to address the problem; and **A**ssessing the impact of that response.

6. The awards emphasise the skills that can often be overlooked but have proven to have real results in terms of crime reduction and prevention. Recognised skills in these awards are good and thoughtful problem analysis, the clear identification of the causes of crime and issues of concern for local communities, implementing a response that considers whether the problem can be eliminated by targeted action aimed at offenders, victims and/or locations and robust evaluation to identify the impact a project has had on resolving the problem. Further information about the awards is available at http://www.homeoffice.gov.uk/tilley-awards/

AWARDS STRUCTURE AND 2012 THEMES

7. One deadline for entries is to be reintroduced for this year's awards. Themes will remain. Applications are invited from projects that can demonstrate that they have successfully tackled crime within the following themes;

- ***Projects led by Non-Police Agencies***

Statutory agencies and VCSE sector are particularly invited to apply, including projects led by the Fire and Rescue Service, Local Authorities or the Ambulance service.

- ***Offender Based Approaches***

This category invites applications from stakeholders/projects that have successfully cut crime, or successfully reduced re-offending rates in their areas through offender focused approaches.

- ***Tackling Gang and Youth Violence***

This category invites applications from projects that have successfully tackled street gang or youth violence in their areas.

- ***Violence Against Women and Girls***

Applications are invited from projects that have addressed violence against women and girls. This includes sexual violence (both male and female victims), domestic violence (both male and female victims), honour based violence, female genital mutilation, forced marriage, Prostitution, Lap Dancing and projects focussed around perpetrator engagement.

- ***Alcohol and Drugs***

Applications are invited from projects that have tackled alcohol and drug related crime in their areas.

- ***Acquisitive Crime***

Entries are invited from projects that have addressed acquisitive crime in their areas. Types of crimes include metal theft, burglary, robbery, vehicle crime, retail and business crime etc.

- ***Anti Social Behaviour***

Applications are invited from projects that have tackled anti-social behaviour in their area.

- ***Community Activism – Young People***

This category has been created to recognise the positive contribution to crime reduction/prevention made within their communities by young people. Projects submitted into this category must have young people at the heart of the project whereby they have been involved in identifying priorities or designing interventions or supporting the delivery of local interventions.

- ***Vulnerable Groups***

Applications are invited from projects that have tackled crime targeted at vulnerable groups on the basis of race, religion, sexual orientation, transgender, age, disability or vulnerable families.

- ***Other Crime Types***

This category invites applications from projects that have tackled crimes which do not fall under any of the above themes.

• We are keen to receive applications from organisations/partnerships tackling Serious Organised Crime under this category

• Applications are also invited under this category for projects tackling problems such as seasonal crime, design out crime or environmental crime.

8. The deadline for submitting entries is 1:00pm on Wednesday 27th June 2012.

Deciding the category within which to submit your application

9. Many projects entered into the Tilley Awards address a number of crime types simultaneously. For example, projects tackling anti-social behaviour also frequently address criminal damage. Projects may only be entered once in the 2012 competition and may not be entered for multiple themes. It is for project authors and their partners to decide the theme within which their project is considered.

SECTION THREE – THE JUDGING CRITERIA INTRODUCTION

The 400 words summary

60. As set out at paragraphs 24-28, this year the awards will see the continuation of the public vote element of the scheme, introduced in 2011. This will involve partners and members of the public voting on their favourite entry[5] from the national finalists. This aims to enhance the profile of national finalists amongst interested parties and demonstrate that problem-solving can be adopted to address a broad range of crime types.

[5] Theme winners and certificate of merit nominations

61. The summary should therefore be treated as an important, stand-alone document that provides a succinct description of the project. Although sections of the main application are likely to form the basis of the summary, these do need to be summarised rather than simply used in full length. You can include diagrams, charts and photographs but may wish to consider how they impact on the overall size of your application, which is restricted to 1MB.

The assessment criteria

62. Entrants should have a clear understanding of the SARA problem-solving model and ensure the entry covers all stages in this approach.

63. Both the sift team and final judging panel are asked to score the strengths and weaknesses of the entry based only on the evidence provided and against the criteria outlined below. It is strongly suggested that authors ensure they are familiar with the criteria before writing the application. Where possible, authors should attend one of the roadshows being arranged by the Home Office. Further information about the road shows is contained at paragraphs 11-13 of this guidance.

64. The criteria below are supplemented by prompt questions and statements. Whilst applications do not need to answer these one by one, they may assist shaping the content of the application to follow the SARA process. Comments in *italics* are quotes from the 2007 final judging panel, and are included to highlight why these issues are relevant.

65. Please note that due to their importance in the Problem Oriented Approach, scores for the analysis and the assessment are weighted, scoring double the raw score. To score highly overall in the competition, these key areas must be fully addressed in the application form.

CRITERIA

Scanning

A. High level identification of a problem/set of problems

- What were the initial indicators that a problem existed?

B. Problem(s) of significant concern to the community

- Were there further criminal consequences resulting from this problem?

C. Appropriate involvement of people from the police and from other agencies in identifying the problem(s)

- What sources of data and stakeholders were used to identify the problem?
- What input from the local community was evident in identifying the problem?
- Who were the stakeholders, beyond the victims, with an interest in its reduction?

2007 Judging panel feedback: *"It is not always obvious why a particular initiative was chosen or why the particular issue was selected from all the other potential problems to solve."*

Analysis

A. Clear, specific and realistic objectives

- What was the real problem(s) that this project/partnership sought to address?
- What were the objectives of the project/partnership? (These are two separate questions but need to be answered clearly).

B. Analysis of information is appropriate for the problem

- How was the extent of the problem measured?

C. Conclusions about the causes and underlying conditions that precipitated the problem that flow logically from the data

- What caused, precipitated or enabled the problem(s)?
- Critically assess the previous responses to the problem(s).
- Comment on the validity of the data and the reliance that can be placed upon it. Consider data from the same period last year and in the months proceeding the period under review.

D. The analysis demonstrates knowledge about the nature and extent of the problem(s)

- Using the Problem Analysis Triangle (PAT) describe the conditions producing the problem behaviour rather than just focusing on who was involved.

E. Involvement of and contributions by all the agencies that have a stake in this problem identified.

F. Gaps of information identified and taken into account.

2007 Judging panel feedback: *"I want to see some effort to gain knowledge about all three sides of the problem triangle: offender, target/victim and place. It is fine if the applicant tried to get information on a topic, but couldn't because of data problems. They must show effort. Efforts that involve talking to parties involved in the problem: managers, offenders, victims etc are always good. Simply analysing police data or surveys are usually weak. Mostly I look for insight from the analysis, rather than simply recounting tables and charts."*

Response

A. Clear relationship between the analysis and the design of the response(s)

- What actions were taken to address the problem?
- What practical methods were used to tackle the problem and how did each method work e.g. how did the approach prevent or reduce the problem(s)?

B. Clear reasons why this particular approach/response was chosen over others

- Show working, especially about how and why particular solutions were chosen over others. Some applications may have chosen a good set of tailored solutions but unless the choice is explained it can still look like a scatter-gun approach grabbed at random from the nearest toolkit.
- If a range of responses were put in place were they chosen to complement each other?
- What was done to consult and engage with the local community?

C. Clear partnership ownership of the response, as required by the problem D. Planning and resource allocation as required by the proposed response

- Which stakeholders were originally planned to be involved in supporting/delivering the response?
- What were the actual demands on the lead and partnership agencies in terms of time, money, expertise etc?
- How were the stakeholders alerted and motivated to help? Were any standards required (consider the 6 Hallmarks of Effective Partnerships)?

E. Difficulties identified and well managed

- What difficulties did the project face in implementing the response/s and how were they overcome?

F. Evidence of an effective ongoing review mechanism and changes made in response to this process

- Has there been any impact on the ways of working with other agencies in the future and methods of operation?

G. Consideration of the sustainability and transferability of the response(s)/approach

- What consideration was given to the sustainability of the results i.e. exit strategy?

H. Innovative measures or use of standard measures in new areas of work

2007 Judging panel feedback: *"In developing the response I want to see something that handles more than one side of the triangle. I also look for uses of situational crime prevention methods. I am always sceptical of offender based strategies that are not coupled with either victim/target strategies and/or place strategies."*

"On sustainability I look for interventions that the agencies could walk away from with an expectation that the problem will not return right away. If the solution requires an ongoing commitment of resources by the police or others, then I wonder how long it will be before things fall apart. Many offender based strategies fall victim to this concern – enforcement must be maintained or offender services provided."

Assessment

A. Clear use of evaluation data to both inform and improve the response(s)

- Each project/partnership needs to establish a baseline against which to measure results/achievements.
- Be honest: if it was not the success anticipated explain why and show how steps will be taken to improve performance – this shows a strong problem-solving approach and a willingness to continuously improve performance.

B. Evidence of whether the response(s) achieved what was intended

- Evaluate the results - what statistical evidence is there that the response/s was effective in tackling the problem?
- How was the impact of the project assessed?

C. Methods of evaluation appropriate for the research question providing some evidence of impact

- What qualitative evidence of impact is there from residents, people taking part etc.?

D. Evidence of appropriate partnership involvement E. Evaluation extending the knowledge and understanding of the problem, the underlying causes and/or the potential solution

- What evidence is there that the success was attributable to the actions?
- Be specific – some of the entries had a lot of elements that were described as 'transferable' but it wasn't clear which were vital, which were useful and which were actually redundant.
- What are the lessons for the future? What would be done differently another time?

2007 Judging panel feedback: *"I want to see a before and after comparison as well as a control group. Multiple measures are useful. Cost benefit calculations are good, but not essential."*

Written presentation

A. Format of the document – The same font should be present throughout.

B. A strong summary is provided so that the reviewer is aware of the main points before looking at the detail in the entry.

C. A conclusion that highlights the key selling points for the entry. Information about local colour and character should be included. Many accounts of urban regeneration, youth activity schemes etc. can sound very similar to other entries, being distinctive can help make a good impression.

D. Maps, diagrams, newspaper articles, posters and other printed material can all be useful in moderation but contribute towards the size of the application which must not exceed 1MB.

E. Any charts that are used in illustration need to be clearly labelled showing what is being measured, the time period and have a clear title stating what the chart is illustrating. Percentages and raw numbers should be used as appropriate.

2007 Judging panel feedback: *"I like maps that show where the problem is and the important features of the problem e.g. road networks and various facilities. Charts are better than tables and tables are better than having the figures mentioned in the narrative. Photos can work very well, if they are clear."*

Coherence of project
A. Acronyms or jargon that a layperson would not understand are not be used

B. The entry is kept simple and follows a logical sequence.

C. The entry is structured around the Problem Analysis Triangle and/or other environmental criminology theories to present ideas in a coherent way.

D. Signs that each stage of the project grew out of the preceding stages, for example, the response does actually address the problem highlighted by the analysis; the evaluation does measure what is important; there is some awareness of the cost-effectiveness of the project/approach adopted by the partnership

2007 Judging panel feedback: *"The best entries have a story running all the way through – if an entry doesn't have this it can be really quite hard to read."*

Appendix C: Goldstein and Tilley Award Sample Submissions

Goldstein Award
Finalists and Winners (N=59)

Year	Department	Project
2000	Charlotte-Mecklenburg Police Department (Charlotte, NC US)	Uptown Men's Shelter
2000	Joliet Police Department (Joliet, IL US)	Licensing Rental Property in Joliet: Repairing Neighborhoods With Partnerships
2000	Kansas City Police Department (Kansas City, MO US)	Failure to Pay for Gasoline at Service Stations
2000	San Diego Police Department (San Diego, CA US)	Mid-City Graffiti Project
2000	San Diego Police Department (San Diego, CA US)	The Question of Independent Living
2000	Vancouver Police Department (Vancouver, BC Canada)	Showdown at the Playground: A community confronts its drug and disorder problem
2001	Buffalo Police Department (Buffalo, NY US)	Workable Solutions to the Problem of Street Prostitution in Buffalo, N.Y.
2001	California Highway Patrol (CA US)	Corridor Safety Program: A Collaborative Approach to Traffic Safety
2001	Chula Vista Police Department (Chula Vista, CA US)	The Chula Vista Residential Burglary Reduction Project
2001	Rogers County Sheriff's Office (OK US)	Reducing Trailer Theft by Targeting Market for Stolen Goods
2001	Salt Lake City Police Department (Salt Lake City, UT US)	The False Alarm Solution: Verified Response
2001	South Euclid Police Department (South Euclid, OH US)	A Police-School Partnership Approach to Bullying, Threatening and Intimidation in Public School
2002	California Highway Patrol (CA US)	Safety and Farm Labor Vehicle Education Program
2002	Charlotte-Mecklenburg Police Department (Charlotte, NC US)	Baker One Domestic Violence Intervention Project
2002	Charlotte-Mecklenburg Police Department (Charlotte, NC US)	Hispanic Robbery Initiative
2002	Halton Regional Police Service (Halton, ON Canada)	Let's Dance: A Community's Collaborative Response to an All Ages Nightclub
2002	Miami Police Department (Miami, FL US)	Allapattah Produce Market Power Play (resubmission)
2002	Royal Canadian Mounted Police (BC Canada)	Project Metrotown
2003	California Highway Patrol (CA US)	Vehicle Ownership Security
2003	Lancashire Constabulary (Lancashire, UK)	Operation Kerb
2003	Lancashire Constabulary (Lancashire, UK)	The Tower Project
2003	Oakland Police Department (Oakland, CA US)	Oakland Airport Motel Program
2003	Plano Police Department (Plano, TX US)	Underage Drinking: More than a MINOR Issue
2003	Surrey Police (Surrey, UK)	Surrey Street Standards
2004	Hampshire Constabulary (Hampshire, UK)	Operation Cobra: Tackling Vehicle Crime in the City of Portsmouth
2004	Lancashire Constabulary (Lancashire, UK)	Mole Hills from Mountains
2004	Lancashire Constabulary (Lancashire, UK)	The Hopwood Triangle
2004	Plano Police Department (Plano, TX US)	Reducing Traffic Congestion Around Barron Early Childhood School
2004	Vestfold Police District (Vestfold, Norway)	Gypsy Cabs in Tonsberg

Year	Department	Project
2005	Boston Police Department (Boston, MA US)	Operation Cloak and Dagger
2005	Carrollton Police Department (Carrollton, TX US)	Team: Reducing Vehicle Burglaries
2005	Charlotte-Mecklenburg Police Department (Charlotte, NC US)	Belmont Neighborhood Violence Reduction Project
2005	Isle of Man Constabulary (British Isles, UK)	Project Centurion
2005	Lancashire Constabulary (Lancashire, UK)	Safer Sex Works
2005	Sheboygan Police Department (Sheboygan, WI US)	Neighbors Against Drugs
2005	Staffordshire Police Department (Staffordshire, UK)	Nowhere to run, Nowhere to Hide: Neighborhood Burglary Reduction
2005	Sussex Police (Sussex, UK)	Operation Dodger
2006	High Point Police Department (High Point, NC US)	Eliminating Overt Drug Markets
2006	Lancashire Constabulary (Lancashire, UK)	Thorpe Close Neighborhood Policing Initiative
2006	Port St. Lucie Police Department (Port St. Lucie, FL US)	Bulldozing - Construction Site Burglary
2006	Transport for London (London, UK)	Safer Travel at Night Campaign
2007	Anaheim Police Department (Anaheim, CA US)	The Boogie: When Jack Met SARA
2007	Charlotte-Mecklenburg Police Department (Charlotte, NC US)	Operation Safe Storage
2007	Hampshire Constabulary (Hampshire, UK)	Operation Kensington
2007	Lancashire Constabulary (Lancashire, UK)	Blackburn with Darwen Family Intervention Programme
2007	Lancashire Constabulary (Lancashire, UK)	Operation Abingdon
2008	Arlington Police Department (Arlington, TX US)	Operation Spotlight
2008	Boston Police Department (Boston, MA US)	District D-14: Breaking & Entering Solution Plan
2008	Lancashire Constabulary (Lancashire, UK)	MOPPIN up Dodge
2008	Lancashire Constabulary (Lancashire, UK)	Operation Pasture
2008	Madison Police Department (Madison, WI US)	Halloween on State Street
2008	Transport for London (London, UK)	Tackling Youth Crime & Anti-Social Behaviour on London's Buses
2008	Washington State Patrol (WA US)	Motorcycle Safety Through Licensing, Education, and Enforcement
2009	Chula Vista Police Department (Chula Vista, CA US)	Reducing Crime and Disorder at Motels and Hotels in Chula Vista, California
2009	Greater Manchester Police (Manchester, UK)	Operation Cougar - reducing gang related firearms discharges - Metropolitan Division
2009	Lancashire Constabulary (Lancashire, UK)	Operation Deface
2009	Nassau County District Attorney's Office (Mineola, NY US)	Renaming Terror Avenue
2009	Warwickshire Police (Warwick, UK)	Trolley Safe
2009	Winnipeg Police Service (Winnipeg, MB Canada)	The Winnipeg Auto Theft Suppression Strategy

Random Sample (N=100)

Year	Department	Project
2000	Charlotte-Mecklenburg Police Department (Charlotte, NC US)	North Tryon Street Corridor Commercial Burglaries
2000	Fontana Police Department (Fontana, CA US)	Drake Apartments
2000	Joliet Police Department (Joliet, IL US)	Guntrack Project - Gun Violence Reduction Through Intervention and Deterrence
2000	Mesa Police Department (Mesa, AZ US)	Theft Reduction Action Program
2000	National City Police Department (National City, CA US)	Q Avenue Project
2000	Ontario Police Department (Ontario, CA US)	Slamming the Brakes on Street Racing in Ontario
2000	Stamford Police Department (Stamford, CT US)	Mobile ATM Robberies
2001	Appleton Police Department (Appleton, WI US)	The Park Rescue Project
2001	Baltimore County Police Department (Baltimore, MD US)	Workplace Violence Initiative
2001	Chicago Police Department (Chicago, IL US)	The Area Five Abandoned Buildings Project
2001	El Paso Police Department (El Paso, TX US)	Border Partners Anti-Auto Theft Project
2001	El Paso Police Department (El Paso, TX US)	West Texas H.I.D.T.A. Stash House Task Force
2001	Fresno Police Department (Fresno, CA US)	The Fresno Inn
2001	Henrico County Division of Police (Richmond, VA US)	Public Safety Response Team Program
2001	Kankakee Police Department (Kankakee, IL US)	Problem-solving Approach to Drug Enforcement Using a Metropolitan Enforcement Group
2001	Los Angeles Police Department (Los Angeles, CA US)	Operation ABC
2001	Metropolitan Police District of Columbia (Washington DC, US)	Problem-solving Partnership Shuts Door on Illegal Massage Parlor
2001	Monrovia Police Department (Monrovia, CA US)	Safe City Safe Campus Steering Committee
2001	Pasadena Police Department (Pasadena, CA US)	Anti Youth Violence Program
2001	Phoenix Police Department (Phoenix, AZ US)	Project Kindle
2001	Prince George's County Police Department (MD US)	Trading Places Program
2001	San Diego Police Department (San Diego, CA US)	Operation Lone Wolf
2001	San Diego Police Department (San Diego, CA US)	Transient Problems at the Clairemont Square Mall
2001	Springfield Police Department (Springfield, IL US)	Springfield Area Resource Guide (SARG)
2001	Union City Police Department (Union City, CA US)	Meeting the Challenge of Safe Family Entertainment
2002	Boulder Police Department (Boulder, CO US)	University Hill Community Improvement Plan
2002	California Department of Alcoholic Beverage Control (Sacramento, CA US)	Grant Assistance Program
2002	Fort Lauderdale Police Department (Fort Lauderdale, FL US)	Police Response to Homelessness
2002	Illinois State Police (Springfield, IL US)	Adopt-a-School
2002	Littleton Police Department (Littleton, CO US)	Deluxe Trailer Park Problem-solving Project
2002	Los Angeles County Sheriff's Department (Los Angeles, CA US)	Street Prostitution: Viable Solutions to Solving the Problem
2002	Miami Police Department (Miami, FL US)	Coconut Grove Problem-solving Team
2002	Minneapolis Police Department (Minneapolis, MN US)	St. Philip's Initiative
2002	New Rochelle Police Department (New Rochelle, NY US)	The Robert Hartley Housing Complex Project

Year	Department	Project
2002	Pasadena Police Department (Pasadena, CA US)	Parade Watch: Deterring Terrorism at the Rose Parade
2002	Plano Police Department (Plano, TX US)	Street Racing: A Fast Track to Jail
2002	San Diego Police Department (San Diego, CA US)	North Park Graffiti Task Force
2002	Vancouver Police Department (Vancouver, BC Canada)	Deter and Identify Sex-Trade Consumers (D.I.S.C.)
2002	Wilson County Sheriff's Department (TN US)	Senior Citizens Awareness Network (SCAN)
2003	Bryan Police Department (Bryan, TX US)	Summer Sundays at Sadie Thomas Park
2003	Cleveland Police (Middlesbrough, UK)	Operation Magpie
2003	Durham Police Department (Durham, NC US)	Dealing with Noise Complaints Around University Campuses
2003	Halton Regional Police Service (Halton, ON Canada)	Project CAPER: Community And Police Eliminating Recidivism
2003	Illinois State Police (Springfield, IL US)	The Youth Assistance Program Fund
2003	Marietta Police Department (Marietta, GA US)	M-STAR: Marietta Strategically Targeting Areas with Resources
2003	New Rochelle Police Department (New Rochelle, NY US)	Project ACHILLES
2003	Rolling Meadows Police Department (Rolling Meadows, IL US)	Police Neighborhood Resource Center
2003	San Diego Police Department (San Diego, CA US)	1500 50th Street Project
2003	San Diego Police Department (San Diego, CA US)	Nightclub After-hours Nuisance Project
2003	Savannah Police Department (Savannah, GA US)	Savannah Impact Program
2003	Virginia Beach Police Department (Virginia Beach, VA US)	Investigation of Housing Fraud in Section 8 Housing Choice Voucher Program
2003	White Plains Police Department (White Plains, NY US)	Operation Safe Streets
2004	California Highway Patrol (CA US)	Commercial Industry Education Program
2004	Gulf Breeze Police Department (Gulf Breeze, FL US)	Educating Parents and Teachers to Detect Drug and Alcohol Use
2004	Kansas City Police Department (Kansas City, MO US)	Westside CAN Center: Day Laborer Project
2004	Regina Police Service (Regina, SK Canada)	Regina Stolen Auto Strategy
2005	California Highway Patrol (CA US)	Traffic Safety Outreach to the African American Community (TSOAAC)
2005	San Diego Police Department (San Diego, CA US)	Psychiatric Emergency Response and Homeless Outreach Teams
2005	White Plains Police Department (White Plains, NY US)	Community Advocacy
2006	Baltimore Police Department (Baltimore, MD US)	Community Safe Zone Project
2006	Casper Police Department (Casper, WY US)	Casper Community Meth Watch Committee
2006	Fort Myers Police Department (Fort Myers, FL US)	Juvenile Arrest and Monitoring Unit (JAM)
2006	Hamilton Police Services (UK)	Westdale Mobilized Project
2006	Houston Police Department (Houston, TX US)	Sherwood Forest Apartments Burglary Project
2006	Los Angeles Police Department (Los Angeles, CA US)	77th Street Narcotic Location Abatement Letter Program
2006	Overland Park Police Department (Overland Park, KS US)	Residential Security
2006	Plano Police Department (Plano, TX US)	Haggard Park Project
2006	Politie, Midden en West Brabant (Midden en West Brabant, Netherlands)	Groenewoud "Out of Business"
2006	San Angelo Police Department (San Angelo, TX US)	See! It's me! Identity Theft Prevention Program

Year	Department	Project
2006	University of Wisconsin-Madison Police Department (Madison, WI US)	Community and Police Response to Graffiti, within the Mosse Humanities Building
2007	Arlington Police Department (Arlington, TX US)	Citizen Notification Service and CrimeWeb
2007	Conroe Police Department (Conroe, TX US)	2006 Drug Initiative
2007	Hampshire Constabulary (Hampshire, UK)	The Bridge Project
2007	Los Angeles Police Department (Los Angeles, CA US)	Devonshire Area PALS
2007	Merseyside Police Department (Merseyside, UK)	Merseyside Roads Casualty Reduction Project
2007	Myrtle Beach Police Department (Myrtle Beach, SC US)	Help Us Help You
2007	Regina Police Service (Regina, SK Canada)	Stolen Auto Strategy
2007	Washington State Patrol (WA US)	Homeward Bound Project
2008	California Highway Patrol (CA US)	Operation Impact
2008	Fort Lauderdale Police Department (Fort Lauderdale, FL US)	The Homeless Outreach Program
2008	Hampshire Constabulary (Hampshire, UK)	Improving the effectiveness of reducing and detecting criminal damage
2008	Hopkins Police Department (Hopkins, MN US)	Blake Road Corridor
2008	Indio Police Department (Indio, CA US)	Community Outreach Unit/Graffiti Task Force
2008	Johnson City Police Department (Johnson City, TN US)	Building on Success: Citizens' Police Academy, Alumni Association, and Junior Police Academy
2008	Las Vegas Metropolitan Police Department (Las Vegas, NV US)	Fremont Corridor Initiative
2008	Merseyside Police Department (Merseyside, UK)	Liverpool South Vehicle Crime
2008	Neenah Police Department (Neenah, WI US)	Crime Reduction at Low Income Housing Development
2008	Plano Police Department (Plano, TX US)	Crime Reduction Through Neighborhood Watch
2008	Union County Sheriff's Office (Marysville, OH US)	State Route 4 Campaign
2008	Waukesha Police Department (Waukesha , WI US)	Project S.W.E.E.P.
2009	Antioch Police Department (Antioch, CA US)	City of Antioch Community Action Team (C.A.T.) Program
2009	Carabineros of Chile (Chile)	Police Intervention: Security Building with the School Community
2009	Cleveland Police (Middlesbrough, UK)	Choice Helpline to reduce Honour Based Violence and forced marriage
2009	Irvine Police Department (Irvine, CA US)	Irvine Police Department - Return Home Registry
2009	Lancashire Constabulary (Lancashire, UK)	Operation TANCRED: Organised Offences Against the Elderly
2009	Lexington Division of Police (Lexington, KY US)	Community Law Enforcement Action and Response Program (CLEAR)
2009	Merseyside Police Department (Merseyside, UK)	Operation Student Survey
2009	Palm Beach County Sheriff's Office (West Palm Beach, FL US)	Plantation Mobile Home Park: A Snapshot of Success
2009	South Yorkshire Police (South Yorkshire, UK)	Operation Blight
2009	South Yorkshire Police (South Yorkshire, UK)	Parents as Partners

Tilley Award
Finalists and Winners (N=39)

Year	Department	Project
2000	Devon and Cornwall Constabulary (Exeter, UK)	POP Within 2 Area Plymouth
2000	Lancashire Constabulary (Lancashire, UK)	Implementation of POP in Lancashire
2000	Lancashire Constabulary (Lancashire, UK)	Operation Adelphi
2000	Staffordshire Police Department (Staffordshire, UK)	Make it Count Scheme: Partnership Response to Begging in Stoke-on-Trent City Centre
2000	Staffordshire Police Department (Staffordshire, UK)	Operation Encompass
2001	Lancashire Constabulary (Lancashire, UK)	Improving POP initiatives in Lancashire
2001	Lancashire Constabulary (Lancashire, UK)	Operation Atlas
2001	Merseyside Police Department (Merseyside, UK)	Operation Crystal/Crystal Clear
2001	Northhamptonshire Police (Northhamptonshire, UK)	The Blackthorn CASPAR Project
2002	Avon and Somerset Constabulary (Bristol, UK)	Car Clear Project
2002	Avon and Somerset Constabulary (Bristol, UK)	Car Cruisers
2002	Avon and Somerset Constabulary (Bristol, UK)	St Johns Road Sheltered Housing Scheme
2002	Lancashire Constabulary (Lancashire, UK)	B.A.N.D.: Burnley Against Night-time Disorder
2002	Lancashire Constabulary (Lancashire, UK)	Bikesafe 2000 +
2002	Lancashire Constabulary (Lancashire, UK)	Bridging the Gap
2002	Lancashire Constabulary (Lancashire, UK)	The Future is....Yellow!
2002	West Midlands Police (UK)	A Safe Route
2003	Metropolitan Police Service (London, UK)	Problem-solving Process Implementation Programme
2003	Police Service of Northern Ireland (Londonderry, Northern Ireland, UK)	Campaign 'Get Home Safe'
2003	Police Service of Northern Ireland (Londonderry, Northern Ireland, UK)	Tackling City Centre Assaults in Foyle District Command Unit
2004	Avon and Somerset Constabulary (Bristol, UK)	Operation Hercules
2004	Hampshire Constabulary (Hampshire, UK)	Operation Cobra
2004	Staffordshire Police Department (Staffordshire, UK)	Safe and Secure, Twenty Four Seven
2005	Lancashire Constabulary (Lancashire, UK)	Mountains into Molehills
2005	Lancashire Constabulary (Lancashire, UK)	Return of the Happy Shopper
2005	Sussex Police (Sussex, UK)	Operation Dodger
2006	Avon and Somerset Constabulary (Bristol, UK)	Operation Jupiter
2006	Hampshire Constabulary (Hampshire, UK)	Operation Mullion
2006	Lancashire Constabulary (Lancashire, UK)	Operation SeaQuest
2006	Metropolitan Police Service (London, UK)	Street Population Street drinkers in Camberwell
2007	Lancashire Constabulary (Lancashire, UK)	MOPPIN up Dodge
2007	Staffordshire Police Department (Staffordshire, UK)	The Quinton Escape Project
2007	Sussex Police (Sussex, UK)	Tackling the Fear of Crime
2008	Greater Manchester Police (Manchester, UK)	Bolton BeSafe Reducing Criminal Damage
2008	Safer Merton (Merton, UK)	Park Life Merton
2008	West Yorkshire Police (Wakefield, UK)	Operation Wilt: Bradford North

Year	Department	Project
2009	Avon and Somerset Constabulary (Bristol, UK)	Operation Fragment
2009	Hull Citysafe (Hull, UK)	Hull Domestic Abuse Partnership
2009	Lancashire Constabulary (Lancashire, UK)	The Engage Team

Random Sampling (N=100)

Year	Department	Project
2000	Derbyshire Constabulary (Derbyshire, UK)	Operation Liberal: An Initiative to Tackle Distraction Burglary
2000	Gwent Police (Gwent, UK)	Operation Arena
2000	Lancashire Constabulary (Lancashire, UK)	Aiming to Reduce Repeat Victimisation for Domestic Violence
2000	Lancashire Constabulary (Lancashire, UK)	Operation Freedom
2000	Merseyside Police Department (Merseyside, UK)	Problem Orientated Policing Youth Disorder in Halewood, Merseyside
2000	Strathclyde Police (Glasgow, Scotland, UK)	Statement of Opinion Unit
2000	West Mercia Constabulary (Worcester , UK)	Operation Crystal 'Policing For the Community'
2001	Avon and Somerset Constabulary (Bristol, UK)	Bristol Anti-Robbery Strategy: A Crime Reduction Solution for the City Centre of Bristol
2001	Cheshire Constabulary (Winsford , UK)	Project Pinpoint
2001	Dumfries and Galloway Constabulary (Dumfries, Scotland, UK)	Dalbeattie Youth Initiative
2001	Greater Manchester Police (Manchester, UK)	Curfew Targeting Strategy at Chadderton
2001	Kent Constabulary (Kent, UK)	Joint Partnership Family Management Project
2001	Lancashire Constabulary (Lancashire, UK)	Operation Aslan
2001	Lancashire Constabulary (Lancashire, UK)	POP in Schools
2001	Metropolitan Police Service (London, UK)	Operation Seneca
2001	Nottinghamshire Police (Nottingham , UK)	Bircotes Autocrime Project
2001	Thames Valley Police (Oxfordshire, UK)	The Bretch Hill Initiative
2002	British Transport Police (London, UK)	Operation Rhino (A new Partnership Approach)
2002	Derbyshire Constabulary (Derbyshire, UK)	Somercotes Beat Team
2002	Lancashire Constabulary (Lancashire, UK)	Casualty Reduction
2002	Lancashire Constabulary (Lancashire, UK)	Operation Calm
2002	Lancashire Constabulary (Lancashire, UK)	Promoting Problem Oriented Policing
2002	North Wales Police (North Wales, UK)	Presthaven Sands
2002	Northumbria Police (Northumbria, UK)	The Usual Suspects
2002	South Yorkshire Police (South Yorkshire, UK)	The Autocrime Project
2002	West Midlands Police (UK)	Business Against Crime
2003	Avon and Somerset Constabulary (Bristol, UK)	SkatePark Project
2003	Cumbria Constabulary (Cumbria, UK)	Operation Migraine
2003	Durham Constabulary (Durham, UK)	Anti-Social Behaviour in Wear Valley and Teesdale
2003	Fife Constabulary (Fife, Scotland, UK)	Student Pranks, No Thanks!

Year	Department	Project
2003	Heddlu Gwent Police (Croesyceiliog, UK)	Anti-Social Use of Motor Vehicles in Blackwood Town Centre
2003	Lancashire Constabulary (Lancashire, UK)	Burnley Wood Arson Reduction
2003	Lancashire Constabulary (Lancashire, UK)	Operation Avoid
2003	Lancashire Constabulary (Lancashire, UK)	Operation Park Keeper
2003	Lancashire Constabulary (Lancashire, UK)	Tower Project
2003	Metropolitan Police Service (London, UK)	The Karrot Project
2003	South Wales Police (South Wales, UK)	Early Identification and Intervention Strategies for At Risk Youth
2003	Warwickshire Police (Warwick, UK)	Corley Services: Putting the Brakes on Motorway Service Crime
2004	Avon and Somerset Constabulary (Bristol, UK)	Missing Persons Initiative
2004	Cleveland Police (Middlesbrough, UK)	Operation Auckland
2004	Cumbria Constabulary (Cumbria, UK)	Grey Street Lights: Thefts from Unattended Motor Vehicles
2004	Cumbria Constabulary (Cumbria, UK)	Whitehaven Towne Centre: Reducing Violent Crime
2004	Greater Manchester Police (Manchester, UK)	Oldham Against Crime Partnership
2004	Lancashire Constabulary (Lancashire, UK)	Burnley Football Club Players Cards
2004	Lancashire Constabulary (Lancashire, UK)	Operation Misper
2004	Lancashire Constabulary (Lancashire, UK)	Safer Sex Works
2004	Lancashire Constabulary (Lancashire, UK)	The Tower Project
2004	North Wales Police (North Wales, UK)	Operation Lifeboat
2004	Northumbria Police (Northumbria, UK)	Hilltop Special School
2004	Northumbria Police (Northumbria, UK)	Street Crime Unit
2004	South Wales Police (South Wales, UK)	The Cardif ESOL
2004	Surrey Police (Surrey, UK)	Staines Town Centre Night Bus Scheme
2005	Cambridgeshire Constabulary (Cambridgeshire, UK)	Operation Dornier
2005	Cumbria Constabulary (Cumbria, UK)	Gray Streetlights: Thefts from Unattended Motor Vehicles
2005	Greater Manchester Police (Manchester, UK)	EMBRACE: East Manchester Burglary, Robbery and Auto Crime
2005	Lancashire Constabulary (Lancashire, UK)	Inner Preston Burglary Reduction Initiative
2005	Lancashire Constabulary (Lancashire, UK)	Operation Adhere
2005	Lancashire Constabulary (Lancashire, UK)	Priority Premises Performance Plans
2005	North Wales Police (North Wales, UK)	E-Crime Wales
2005	South Yorkshire Police (South Yorkshire, UK)	The Edlington Project
2006	Avon and Somerset Constabulary (Bristol, UK)	Tackling Crime to Improve Patient Care
2006	Cumbria Constabulary (Cumbria, UK)	Family Matters
2006	Hampshire Constabulary (Hampshire, UK)	999 Live
2006	Lancashire Constabulary (Lancashire, UK)	Football Festival
2006	Lancashire Constabulary (Lancashire, UK)	Rhyddings Community Safe Project
2006	Merseyside Police Department (Merseyside, UK)	Neighbourhood Policing with Heart & EdgeBeat It
2006	Metropolitan Police Service (London, UK)	Preventing Disorder Promoting Diversion Protecting Diversity

Year	Department	Project
2006	Police Service of Northern Ireland (Londonderry, Northern Ireland, UK)	Peer Leadership Programme
2006	Sussex Police (Sussex, UK)	Inspire
2006	Wiltshire Police (Devizes, UK)	Who's Web Wise
2007	Cleveland Police (Middlesbrough, UK)	Middlesbrough's theft from motor vehicle initiative
2007	Cumbria Constabulary (Cumbria, UK)	Casualty Reduction & Safer Highways Group
2007	Gloucestershire Constabulary (Gloucester, UK)	Operation Kiddie Cop
2007	Humberside Police (Hull, UK)	Community Problem-solving Kit
2007	Lancashire Constabulary (Lancashire, UK)	Operation Regent Restoration
2007	Leicestershire Constabulary (Leicestershire, UK)	Operation Fortify & Safe Routes
2007	Merseyside Police Department (Merseyside, UK)	Sefton Tower 2 Prolific Offender Team
2007	Metropolitan Police Service (London, UK)	Merton's Teenage Gang's Initiative
2007	Metropolitan Police Service (London, UK)	Youth Engagement with Police and Partners-using "CoP Cards"
2007	Police Service of Northern Ireland (Londonderry, Northern Ireland, UK)	Ballygawley Road Housing Estate
2007	Sussex Police (Sussex, UK)	Crawley Retail Crime Division Programme
2008	Cheshire Constabulary (Winsford , UK)	Poynton No Cold Calling Zone
2008	Cleveland Police (Middlesbrough, UK)	Teesside Park
2008	Cumbria Constabulary (Cumbria, UK)	Reducing Youth Anti-Social Behaviour in South Carlisle
2008	Essex Police (Essex, UK)	Op Jabot
2008	Hampshire Constabulary (Hampshire, UK)	Do You Want an Effective DPPO and Reduce Damage
2008	Lancashire Constabulary (Lancashire, UK)	Operation Pasture
2008	Merseyside Police Department (Merseyside, UK)	Next of KIN
2008	Metropolitan Police Service (London, UK)	ASB by Motorcyclists at the Chelsea Bridge Wharf
2008	Metropolitan Police Service (London, UK)	Joint Action Group and Tackling Acquisitive Crime
2008	Milton Keynes Police (Milton Keynes, UK)	PAC against ASB
2008	North Wales Police (North Wales, UK)	Improving Victim Reassurance
2008	Northumbria Police (Northumbria, UK)	Neighbourhood Policing and Management in Northumberland
2008	South Wales Police (South Wales, UK)	Alleygates Project
2008	South Wales Police (South Wales, UK)	From a Bang to a Whimper
2008	South Yorkshire Police (South Yorkshire, UK)	Operation Abash
2008	Staffordshire Police Department (Staffordshire, UK)	Lock It Protect It
2008	Sussex Police (Sussex, UK)	Engage Youth
2008	West Yorkshire Police (Wakefield, UK)	Exclusion Requirements
2009	Northhamptonshire Police (Northhamptonshire, UK)	Corby Jam Team

Appendix D: Problem Frames and Keywords Coding Sheet

Review Date: _____ **Award Year/ Category:_____**

AGENCY INFORMATION

Agency	
Location	
Agency Size	
Crime Analysis/ GIS used	
Problem Type: Behavior and Location	
# Partners	
Partner Agencies	

FRAMES (See pp. 2-3 for Frame Codes):

Scanning	
Analysis	
Response	
Assessment	
Other	

	Problem frame	Examples of associated key words/ phrases
1	**Situational crime prevention** (Cornish and Clarke, 2003)	Increase risk Increase effort Reduce rewards Reduce provocations Remove excuses Opportunity reduction Tailor response to problem
2	**Routine activities** **Problem analysis triangle** (Cohen and Felson, 1979)	Offender/ Victim/ Place Convergence in time and space Handler/ Guardian/ Manager
3	**Repeat victimization** (Farrell and Pease, 1993	Repeated crime Focus on small number of targets (people, places, things) with highest % of all crime 80/20 rule Crime concentration
4	**Hot spots policing** (Sherman,Gartin,Buerger,1989)	Repeated crime at places 80/20 rule Crime concentration
5	**Rational choice** (Cornish and Clarke, 1987)	Calculating criminal Maximize utility Consistency in response Cost/ benefit analysis
6	**Broken windows** (Wilson and Kelling, 1982)	Small problems can lead to bigger problems without intervention Appearance of abandonment Order versus disorder Regulars versus strangers
7	**Neighborhood focus** (non-broken windows)	Collective efficacy Social control
8	**Crime prevention through environmental design** (Jeffery, 1971)	Changes in the built environment Increase feelings of safety Decrease opportunity Increase surveillance Limit access
9	**Defensible space** (Newman, 1972)	Design physical characteristics to increase territoriality Territoriality, Natural surveillance, Image, Milieu

	Problem frame	Examples of associated key words/ phrases
10	**Place management** (Madensen and Eck, 2008)	Educate landlords/ managers about responsibilities Return property management tasks to property owners
11	**Risky facilities** (Eck, Clarke, Guerette, 2007)	Concentration of crime in similar facilities 80/20 rule
12	**Pulling levers** (Kennedy, 1997)	Focused deterrence, Increased risks for specific criminal activities Call-ins, Community incentives/disincentives for continued involvement
20	**Education/ Training**	Crime prevention training and educational materials (pamphlets, community meetings, etc.)
21	**Enforcement**	Arrest Intensive Supervision Targeted patrols
22	**Admin/ Org Changes**	Develop boards, committees, special teams, task forces Change training protocols or hiring practices
23	**Offender Rehabilitation/ Treatment**	Drug/ alcohol treatment services Education services Job training After-school programming
30	**Pareto principle**	80/20 rule A small number of people are responsible for a large proportion of events
31	**Regulatory politics**	Changes in ordinances or regulations
99	**Other**	

Appendix E: Survey of POP Officers

- **Disclosure/ Survey Information**

- **Part 1:** You will be asked to review a series of case descriptions. You are then asked to explain 1) what you think is going on and 2) what you would do if you were tasked with handling these cases. You should approach each of the cases as if you were the officer in charge. Your supervisor will support your decisions and will allow for modest reallocation of officer time if necessary to implement your plan.
    - **[EACH CASE IS PRESENTED ON A SEPARATE PAGE]**
    - **Case #1:** Officers in the central business district have noticed an increase in calls for service to parking lots. These calls have increased during both day and night shifts. Individuals returning to their cars after work or following dinner, drinks, or sporting events at a downtown location have reported thefts from both locked and unlocked vehicles.
    - **Case #2:** The east side of town has seen an increase in calls that are related to general nuisance problems, including complaints about neighbors, vandalism, graffiti, drug dealing, and thefts from vehicles. There have also been a few calls about car thefts and two homicides. The call levels in the east side of town are twice that of any other section of the jurisdiction. Citizens have been complaining to the local media about increases in violence. The east side of town has been unstable in recent years after the primary manufacturer left the area and property values started to decrease. The areas immediately surrounding the old manufacturing plant appear to have the highest levels of calls. Officers report that the majority of victims in the community are either immigrants or the elderly. Very few arrests have been made.
    - **Case #3:** Elected officials have expressed concern about vehicle crashes in your jurisdiction.

- **Part 2:** Please provide answers or circle the appropriate answer.

1. Where is your agency based? (List state/province/region and country)

2. How many sworn officers are in your department (approximately)?

3. What is your rank and title?

4. What division or unit do you work in (e.g. investigations, patrol, crime prevention, crime analysis, etc.)?

5. How long have you been in your current role (in years)?

6. How long have you worked in law enforcement (in years)?

7. What is your gender (circle)

    a. Female
    b. Male

8. What is the highest level of education that you completed? (circle)

    a. Completed high school
    b. Completed some college
    c. Completed 2-year degree
    d. Completed 4-year degree
    e. Advanced degree
        i. If advanced degree, describe the program:
        _____

9. Did you attend the most recent Problem-Oriented Policing (POP) conference in Dayton, Ohio (October, 2013)?

    a. No
    b. Yes

10. Have you attended previous POP conferences?

    a. No
    b. Yes
        i. If yes, how many? _____

11. Have you had any special training in problem-oriented policing (not connected to the annual POP conference)? (circle any that you have had)

    a. In-service training through department/ agency
    b. Academy training
    c. Read article or book about problem-oriented policing
    d. Other training
        i. Describe: _____
    e. None

12. If you have had special training in POP, please identify how much (check box). Leave blank if you have had no special training.

	1 hour or less	Between 1 hour and 1 day	Between 1 day and 2 days	More than 2 days
In-service training through department/ agency				
Academy training				
Other training				

13. Do you use problem-oriented policing in your work? If so, how long have you used POP in your work? (circle)

    a. Never
    b. Less than 1 year
    c. Between 1 and 5 years
    d. Between 5 and 10 years
    e. More than 10 years

14. Does your department consider problem-solving or problem-oriented policing a priority? (circle)

    a. No
    b. Yes
        i. If yes, explain how it is designated as a priority:

        _____

15. Is knowledge of or involvement in problem-oriented policing required for promotion?

    a. No
    b. Yes
        i. If yes, please describe requirement:

        _____

Thank you!
You have completed the survey – please return in the attached envelope. Thank you for your participation in this research.

Appendix F: Scanning and Analysis Frames Lead to Response Frames?

Figures 6 through 10 below depict the realm of potential response frames for each of the S/A frames in Table 12. The response frames are organized clockwise from most frequently used to least frequently used and the size of the circle represents the relative frequency with which they appear with the S/A frame (response frames that are only used once for an S/A frame have been left out of the figures to conserve space). The double-headed arrow in each figure indicates the position where the S/A frame is also found as a response frame.

Figure F 1: Response Frames Associated with S/A Routine Activities Frame

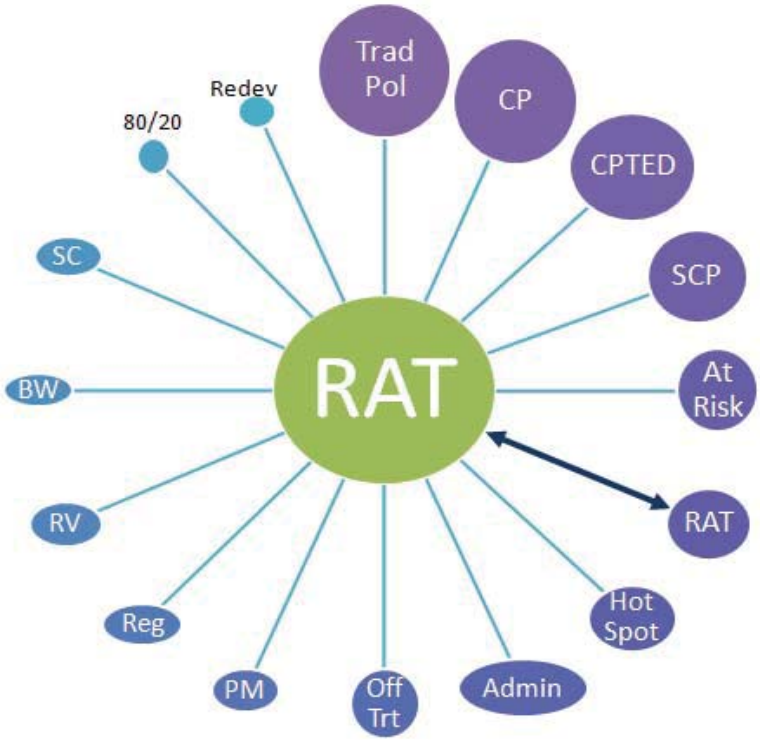


Figure F 2: Response Frames Associated with S/A Hot Spots of Crime Frame

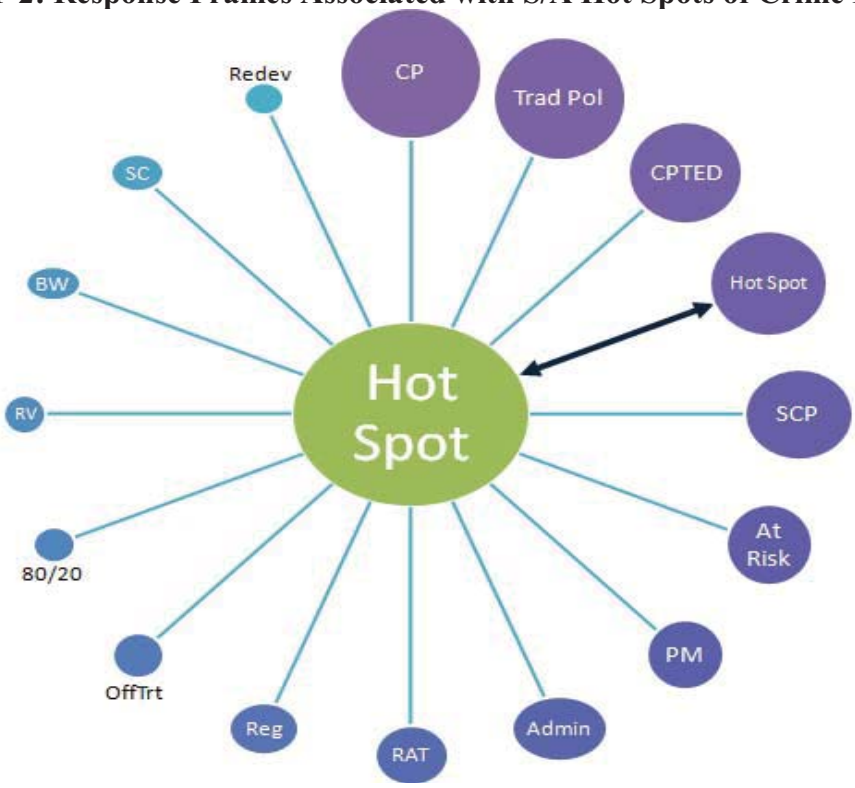


Figure F 3: Response Frames Associated with S/A Broken Windows Frame

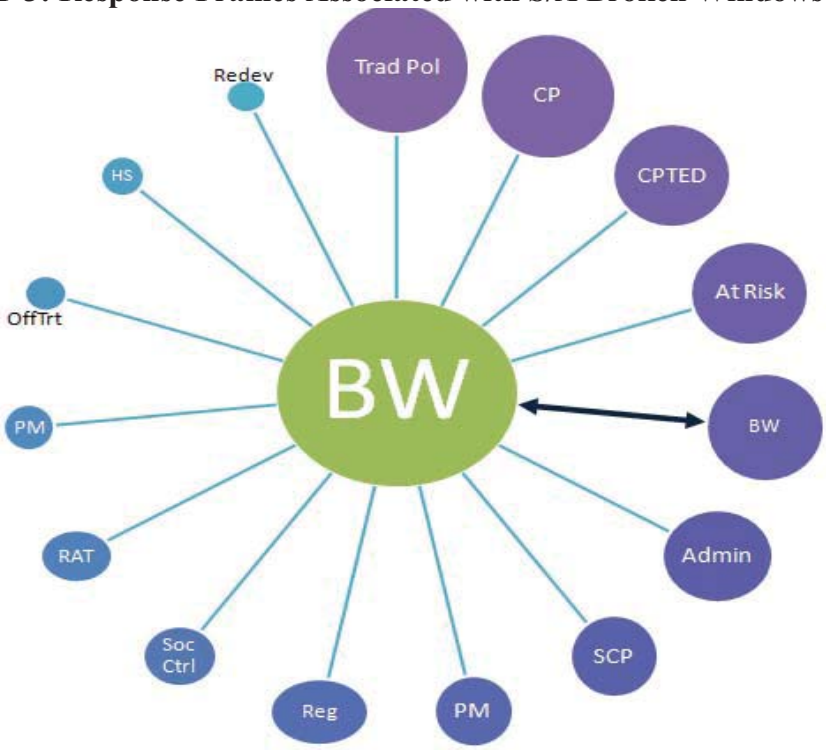


Figure F 4: Response Frames Associated with S/A 80/20 Rule (Pareto Principle) Frame

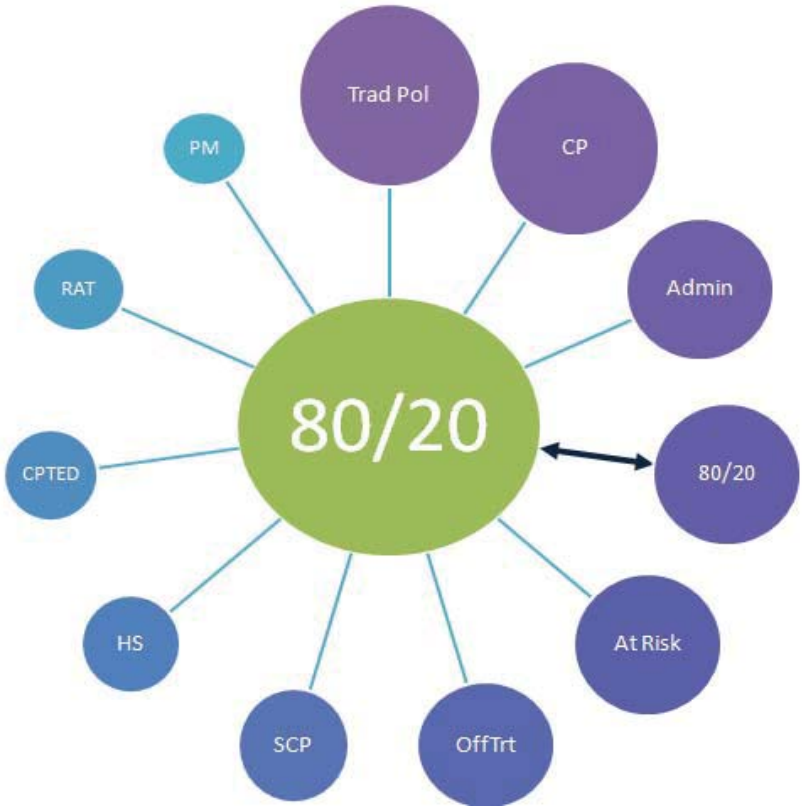
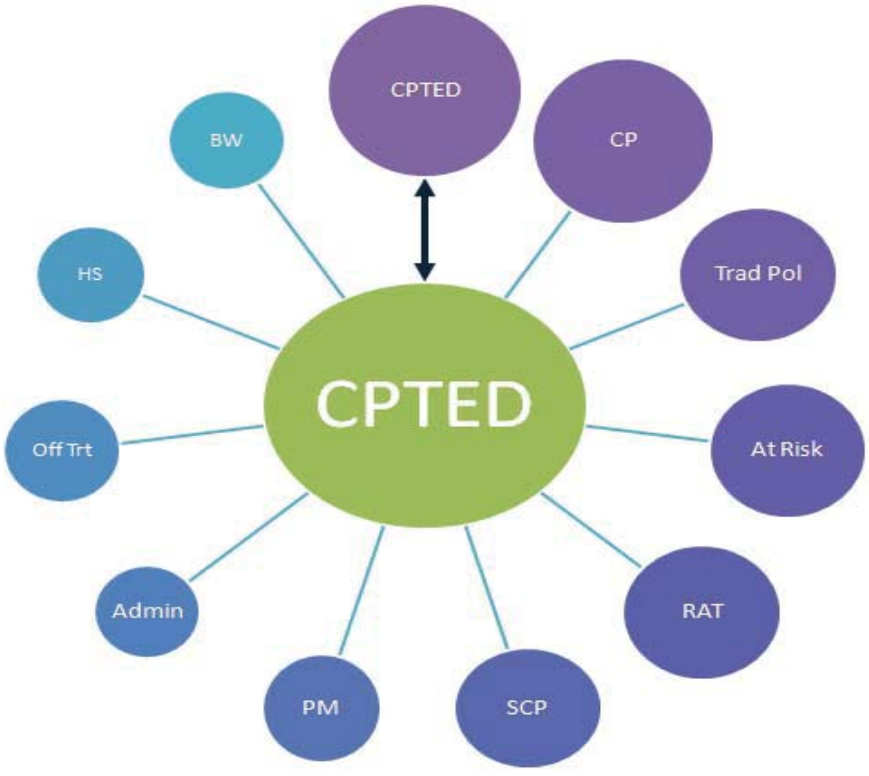


Figure F 5: Response Frames Associated with S/A CPTED Frame



Appendix G: Temporal Distribution of Problem Frames

Scanning/ Analysis Frames

Table G 1: Scanning/ Analysis Frames - Goldstein Sample
(Proportion per Year)

	Total	RoutineAct	Hot Spots	BrokenWin	80/20	CPTED	Place Mgmt	Repeat Vic	Risky Fac	SituationlCP	SocialCtrl	Admin	At Risk	CrimePrev	Regulation
2000	7			.14				.14							
2001	18		.06	.28					.22			.06			
2002	14		.14	.21					.14		.07		.07		
2003	13	.08		.23											
2004	4			.25	.25										
2005	3										.33				
2006	11		.27	.09		.09									
2007	8				.13										
2008	12	.17	.25	.25	.08										
2009	10	.40	.20	.10											

Table G 2: Scanning/ Analysis Frames - Tilley Sample
(Proportion per Year)

	Total	RoutineAct	Hot Spots	BrokenWin	80/20	CPTED	Place Mgmt	Repeat Vic	Risky Fac	SituationalCP	SocialCtrl	Admin	At Risk	CrimePrev	Regulation
2000	7	.43	.14		.14			.14							
2001	10	.20	.40	.10	.20										
2002	9	.44	.56		.11			.11							
2003	12	.33	.25	.08	.08										
2004	14	.21	.14	.14	.07	.14									
2005	8	.50	.50	.25	.13	.25	.13								
2006	10	.20	.10	.20	.20								.10		
2007	11	.55	.27	.18											
2008	18	.44	.44	.06	.06	.11		.11		.06					
2009	1					1.0	1.0								

Table G 3: Scanning/ Analysis Frames - Goldstein Finalists
(Proportion per Year)

	Total	RoutineAct	Hot Spots	BrokenWin	80/20	CPTED	Place Mgmt	Repeat Vic	Risky Fac	SituationlCP	Social Ctrl	Admin	At Risk	CrimePrev	Regulation
2000	6	.33	.17	.17			.33								
2001	6	.50	.33			.33	.17								
2002	6	.33	.33	.33	.17		.17	.17							
2003	6	.17	.33		.17		.17								.17
2004	5	.60	.20	.20	.20	.20	.20								
2005	8	.63	.75	.25		.13	.13	.13		.13	.13			.13	
2006	4	.50	.25	.25	.25			.25							
2007	5	.60	.40		.20	.20	.20								
2008	7	.43	.29	.29		.14				.14					
2009	6	.33	.33			.17	.17		.17						

Table G 4: Scanning/ Analysis Frames - Tilley Finalists
(Proportion per Year)

	Total	RoutineAct	Hot Spots	BrokenWin	80/20	CPTED	Place Mgmt	Repeat Vic	Risky Fac	SituatnalCP	SocialCtrl	Admin	At Risk	CrimePrev	Regulation
2000	5	.40	.20	.20	.40										
2001	4	.25	.25		.25			.25							
2002	8	.63	.13												
2003	3	.33	.33												
2004	3	.67			.33										
2005	3	.67	.33												
2006	4	.25	.25		.25										
2007	3	.67		1.0		.33									
2008	3	.67	.67	.33				.33	.33						
2009	3	.67						.33							

Response Frames

Table G 5: Response Frames - Goldstein Sample
(Proportion per Year)

	Total	Crime Prev	Trad Police	Admin	CPTED	At Risk	SituatnalCP	Regulation	HotSpots	Place Mgmt	Off Trtmnt	Routine Act	Broken Win	SocialCtrl	Repeat Vic	Redevlpmt	80/20	Def Space	Risky Fac	Pull Lev	Other
2000	7	.57	.71	.71	.43			.14		.43					.14	.29					
2001	18	.39	.56	.44		.11	.06	.22			.06		.17	.06		.06			.06	.06	
2002	14	.29	.50	.57		.21		.07	.07		.21		.07	.21		.14					
2003	13	.31	.62	.31	.08	.23	.23	.23		.08	.15		.08	.23							
2004	4	.75	.50			.25	.25				.25		.25	.25			.25				
2005	3	.67	.33	.67		.33															
2006	11	.73	.45	.09	.27	.09	.27	.09	.09	.18	.09		.09	.09		.18					
2007	8	.63	.50	.38	.25	.38			.13		.13						.13				
2008	12	.58	.67	.42		.17	.08	.33	.08	.17	.17	.08		.08							
2009	10	.70	.40	.50	.20	.30	.10	.20			.10	.20	.10								

Table G 6: Response Frames - Tilley Sample
(Proportion per Year)

	Total	Crime Prev	Trad Police	Admin	CPTED	At Risk	SituatnalCP	Regulation	HotSpots	Place Mgmt	Off Trtmnt	Routine Act	Broken Win	SocialCtrl	Repeat Vic	Redevlpmt	80/20	Def Space	Risky Fac	Pull Lev	Other
2000	7	.57	.57	.57	.14	.14	.14		.14		.14				.29		.14				
2001	10	.70	.60	.30	.10	.50	.40	.10	.20				.10								
2002	9	.67	.33	.33	.11	.22	.33		.33	.22					.11		.11				
2003	12	.58	.58	.33	.33	.50	.33	.08	.17	.08	.17										
2004	14	.57	.50	.21	.36	.36	.21	.14	.07	.14	.14			.07			.07				
2005	8	.75	.38	.38	.38	.25	.13	.13		.25	.25	.13					.13				
2006	10	.60	.50	.40	.10	.50		.10	.20												
2007	11	.73	.73	.18	.18	.18	.09	.09	.18	.09	.27	.09	.18			.09					.18
2008	18	.94	.72	.17	.39	.28	.11	.28	.17	.06	.06	.11	.06	.06	.06		.06				
2009	1	1.0		1.0		1.0			1.0												

Table G 7: Response Frames - Goldstein Finalists

(Proportion per Year)

	Total	Crime Prev	Trad Police	Admin	CPTED	At Risk	SituatnalCP	Regulation	HotSpots	Place Mgmt	Off Trtmnt	Routine Act	Broken Win	SocialCtrl	Repeat Vic	Redevlpmt	80/20	Def Space	Risky Fac	Pull Lev	Other
2000	6	.17	.50		.50	.17	.17	.33	.17	.50	.17			.50							
2001	6	.83	.50		.67	.17	.17	.17	.17	.33											
2002	6	.33	1.0	.17	.67	.33	.17	.17		.17			.17	.17	.17						
2003	6	.50	.83	.17	.33			.33	.17	.17	.33	.17									
2004	5	1.0	.60	.20	.80		.60		.20	.40		.40	.20		.20		.20				
2005	8	.63	.63	.13	.25	.13	.38	.13	.25	.25	.25	.13	.13	.25				.13			
2006	4	.75	.50		.25		.25	.25	.50	.50		.50			.25	.25				.25	
2007	5	.40	.20	.20	.60		.60	.40		.40	.20		.20			.20				.20	
2008	7	.86	.71	.43	.71	.14	.71	.29	.29	.14		.14	.29				.14				
2009	6	.67	.67	.17	.33	.50	.33	.17	.17	.17	.17	.17			.17					.17	

Table G 8: Response Frames - Tilley Finalists

(Proportion per Year)

	Total	Crime Prev	Trad Police	Admin	CPTED	At Risk	SituatnalCP	Regulation	HotSpots	Place Mgmt	Off Trtmnt	Routine Act	Broken Win	SocialCtrl	Repeat Vic	Redevlpmt	80/20	Def Space	Risky Fac	Pull Lev	Other
2000	5	.60	.60	.40	.40	.20	.40		.20			.20									
2001	4	.75	.50	.50	.50	.25	.50	.25	.50			.25			.25						
2002	8	.50	.63	.25	.13	.13	.25		.13												
2003	3	.67	.67	.33			.33		.33	.33											
2004	3	.67	.67		.33		.67	.67				.33									
2005	3	.33	.67	.33	.33	.67		.33						.33			.33				
2006	4	.50	1.0	.75	.50	.25	.75		.25												
2007	3	1.0	.67		.67	.67	.33				.33	.67	.33								
2008	3	.67	1.0		.67	.67	.67		.33			.67			.33						
2009	3	1.0	.67	.67		.67						.33			.33						

Appendix H: Survey Demographic Distribution of Problem Frames

Tables H1 through H3 examine the problem definition and response frames that are used by certain segments of the respondent pool for each of the vignettes presented in the survey. For ease of review I transformed the variables into dichotomous and trichotomous elements.

Table H 1: Vignette 1- Select Demographic Characteristics by Frames (Percent)

	Total (N=29)	Definition Frames				Response Frames					
		SituatnalCP	PlaceMgmt	80/20	NO FRAME	Trad Police	Crime Prev	CPTED	PlaceMgmt	80/20	RoutineAct
Gender											
Male	24	67	25	21	21	92	54	33	13	13	8
Female	5	60	20	0	20	100	80	20	0	20	40
Agency Size											
< 500	16	75	19	19	19	94	56	31	6	19	13
> 500	12	50	33	17	25	92	58	33	17	8	8
No Response	1	100	0	0	0	100	100	0	0	0	100
Education											
< 4 Yr Degree	8	75	50	13	13	100	75	25	0	13	13
4 Yr Degree	12	42	8	25	33	100	50	33	25	17	8
Adv Degree	9	89	22	11	11	78	56	33	0	11	22
Rank											
Patrol/Deputy/Det.	10	60	20	20	20	100	50	20	20	20	0
Sgt/Lt/Capt/Chief	19	68	26	16	21	89	63	37	5	11	21
POP Priority											
No	7	57	14	14	29	86	57	14	0	0	29
Yes	22	68	27	18	18	95	59	36	14	18	9

Table H 2: Vignette 2- Select Demographic Characteristics by Frames (Percent)

	Total (N=29)	Definition Frames			Response Frames										
		DefSpace	BrokenWin	NO FRAME	Crim ePrev	Trad Police	CPTED	BrokenWin	At Risk	80/20	Admin	Redevelop	Hot Spots	PlaceMgmt	NO FRAME
Gender															
Male	24	17	17	67	63	46	21	17	17	8	0	8	8	8	8
Female	5	80	0	20	80	80	0	0	20	0	40	0	0	0	0

	Total (N=29)	Definition Frames			Response Frames										
		DefSpace	BrokenWin	NO FRAME	Crim ePrev	Trad Police	CPTED	BrokenWin	At Risk	80/20	Admin	Redevelop	Hot Spots	PlaceMgmt	NO FRAME
Agency Size															
< 500	16	25	25	50	63	44	25	19	6	0	13	6	6	13	13
> 500	12	25	0	75	67	58	8	8	33	17	0	8	8	0	0
No Response	1	100	0	0	100	100	0	0	0	0	0	0	0	0	0
Education															
< 4 Yr Degree	8	38	0	63	63	63	13	13	25	0	0	0	13	0	13
4 Yr Degree	12	17	17	67	67	58	25	0	17	17	17	0	0	8	0
Adv Degree	9	33	22	44	67	33	11	33	11	0	0	22	11	11	11
Rank															
Patrol/Deputy/Det	10	20	20	50	50	40	40	10	10	10	20	0	0	10	0
Sgt/Lt/Capt/Chief	19	32	11	63	74	58	5	16	21	5	0	11	11	5	11
POP Priority															
No	7	29	0	71	71	57	14	0	14	0	0	14	14	0	14
Yes	22	27	18	55	64	50	18	18	18	9	9	5	5	9	5

Table H 3: Vignette 3- Select Demographic Characteristics by Frames (Percent)

	Total (N=29)	Definition Frames					Response Frames			
		CPTED	Trad Police	SocialCtrl	RoutineAct	NO FRAME	Trad Police	CPTED	CrimePrev	NO FRAME
Gender										
Male	24	21	17	4	4	58	71	63	25	21
Female	5	0	0	0	0	100	20	60	40	20
Agency Size										
< 500	16	13	6	0	0	81	44	56	25	31
> 500	12	25	25	8	8	42	92	75	25	8
No Response	1	0	0	0	0	100	0	0	100	0
Education										
< 4 Yr Degree	8	13	25	13	13	38	75	63	25	13
4 Yr Degree	12	8	8	0	0	83	67	67	33	17
Adv Degree	9	33	11	0	0	67	44	56	22	33
Rank										
Patrol/Deputy/Det.	10	20	20	0	0	60	70	80	10	10
Sgt/Lt/Capt/Chief	19	16	11	5	5	68	58	53	37	26
POP Priority										
No	7	0	29	0	14	57	57	71	29	14
Yes	22	23	9	5	0	68	64	59	27	23