PROBLEM ORIENTATION, PROBLEM SOLVING AND ORGANIZATIONAL CHANGE

by

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Abstract: *The widespread adoption of problem-oriented policing requires a dramatic and fundamental change in both the organizational focus of the police and the manner in which day to day policing is performed. The focus of this article is on the factors that have limited the implementation of problem-oriented policing. These are partitioned into two groups; those inhibiting the problem orientation of the organization and those inhibiting the problem solving of police officers. The key principles of successful organizational change are discussed, drawing upon the relevant psychological literature. Examples are given with an emphasis upon public sector agencies. Finally, solutions for overcoming the apparently intractable implementation problems are presented*

that draw on the principles identified in the change management literature.

INTRODUCTION

Just over two decades have passed since Herman Goldstein's seminal article introducing problem-oriented policing (POP) was published. Since then, much effort has been expended on instituting change in police organizations to render them congruent with the approach espoused by Goldstein (1979).

A parsimonious definition of problem-oriented policing is that it aggregates individual events, with a common characteristic, into problems. Rather than deal with individual incidents, police are encouraged to respond to problems by identifying the underlying causes and address these. A broader definition is that problem-oriented policing is a systematic approach for police to constantly improve their ability to fulfill the range of needs expressed to them by the community and the government. Goldstein (1990) recognized the limit of the police organization's authority, and that transferring the unit of analysis from individual incidents to problems was the only rational approach to crime management.

Despite problem-oriented policing's wide appeal amongst senior officers, its implementation appears piecemeal in extent and halting in pace. The widespread transformation of problem-oriented policing rhetoric into practice cannot be expected anytime soon. Reviews of POP implementation reveal that across different police jurisdictions problem-oriented policing principles are applied to varying degrees, but that in most cases implementation involves a small number of officers, is highly focused in terms of geography or the scope of problem examined, and reports mixed success, according to a somewhat informal assessment (Leigh et al., 1996).

Recently, two published reviews of have described the rate of progress toward the problem-oriented policing ideal in the last 20 years. Scott (2000) details how Goldstein's framework has purportedly been implemented and to what degree these attempts deviate from the original model. A number of obstacles facing the advancement of problem-oriented policing are outlined, such as the limited nature of POP training offered by typical police organizations, knowledge being disseminated orally and rarely documented. In consequence, no body of knowledge related to effective problem solving exists, police rarely conduct problem analysis at the policy level, and police-researcher alliances have not developed to the degree anticipated. The last obstacle helps perpetuate some of the other limitations. The tension between researchers' apparent conservatism and the emergency-

driven, action-oriented environment of the police is a critical stumbling block for problem-oriented policing. The dividend available from reconciling these opposing perspectives remains attractive.

Read and Tilley (2000) explored the extent of problem solving across all 43 police forces in England and Wales. The study represents an ambitious examination of the extent of problem-oriented policing implementation in the U.K. at both extremes of the rank structure. By examining examples of successful and unsuccessful problem solving, selected by the police themselves, the authors identified factors common to successful and unsuccessful problem solving. Unsurprisingly, successes were found to:

- exhibit detailed analysis in defining and "pulling apart" problems;

- involve the community in identifying effective responses; and

- select responses based on their likely impact on the stated problem.

Read and Tilley (2000) also examined what factors operate on an organizational level that facilitate or inhibit problem-oriented policing implementation and routinization. Factors identified as facilitative include a committed and involved leadership, incentives for problem solving, and access to practical help and methods of disseminating good practice. Organizational factors that limited problem-oriented policing included not devoting time to problem solving, concentrating on local, low-level problems and a lack of attention to evaluation.

Considering the paucity of comprehensive problem-oriented policing implementations to date, some consideration needs to be given to the nature of the change that problem-oriented policing advocates seek to engineer. As highlighted by Eck and Spelman (1987), a thorough implementation of problem-oriented policing requires two levels of change: the organization needs to become problem-oriented, and frontline officers need to become problem identifiers/solvers (or at least problem identifiers/allocators or identifiers/alleviators).[1] At present, in the U.K., the Performance Indicator (PI) culture is predominant. The one thing guaranteed to change operational priorities is for an area commander to hear that, "crime is up" or "detections are down", or "we are failing to meet our targets." This creates a flurry of activity designed to elicit some "quick wins," routinely with no real thought behind what is driving the volume of crime.

The organizational philosophy (reactive, proactive, or a mixture of both) drives the demand profile of rank and file police officers. If this is changed (from reactive to proactive, say) different outputs are expected from management. However, merely changing the vision of a

police organization will not ensure that police officers will be equipped to identify or solve problems. A manager can empower someone, but if that individual does not have the necessary tools to complete their task, the empowerment is merely setting someone up for failure.

The remainder of this article is structured in the following way: First, some of the problems of problem-oriented policing implementation are discussed, partitioned into two levels of analysis: organizational and front-line. Second, organizational psychology's change management literature is briefly reviewed and a model of change is explored. Last, solutions to the implementation barriers are developed which are consistent with the organizational psychology framework.

OBSTACLES TO LACK OF IMPLEMENTATION

The following list has been developed from the authors' collective experience in working with a number of police forces in the U.K., Australia and North America. Some of the obstacles outlined have been mentioned by others (Read and Tilley, 2000; Scott, 2000), some have not. Most researchers who have spent any time with police officers will recognize the obstacles listed here. Nor is this list a definitive collection. Other problems exist which hinder the efforts of implementing problem-oriented policing, but we consider the ones discussed to be the most prominent.

We have partitioned the obstacles into two groups: those that operate on an organizational level, and those that influence individual problem-solving efforts. This reflects our view, as well as others (Eck and Spelman, 1987 and less explicitly Read and Tilley, 2000), that problem orientation is distinct from problem solving. We feel that problem-oriented policing implementation will only be successful when problem orientation and solving are combined.

Problem Orientation Obstacles (organizational factors)

Rapid Turnover of Staff

The aim of programs such as the Accelerated Promotion Scheme for Graduates (APSG) in the U.K. is to allow talented individuals to rise quickly through police ranks to occupy positions of influence. However, the unintended consequence of fast-track promotion schemes has been that ambitious individuals spend short periods in each role occupied. This results in some officers, arguably those best suited to creative approaches to problem solving, not having enough

time to acquire local knowledge about their community or, worse, having gained valuable experience and then being transferred to another role where lessons learnt may not inform policing action. Sustainable problem solving, either initiatives that require long term commitment or those which rely on the experience of separate but related problems, will be difficult to foster when lessons need to be continually re-learnt, or a body of knowledge is not accumulated.

Where problem-oriented policing has been applied successfully, front line officers are often passionate about what they do and are willing to perform duties outside their job description and/or work extended hours (Braga et al., 2001; Queensland Criminal Justice Commission, 1996). They frequently have contacts in other agencies, built up over time, which they can use to lever in external agency support.

Middle Management Paying Lip Service to Problem-oriented Policing

Police middle management is responsible for translating force policy into local action. In other words, officers in such ranks operationalize strategy into tactical deployment. They wield considerable influence over the direction of police activity and can almost absolutely determine the prospects of success through tacit endorsement or discouragement of new practices.

As a management style, problem-oriented policing suffers from the policing reform treadmill; the observation that reform has been linked to policing for so long that its meaning has been eroded (Goldstein, 1990). To many police officers, problem-oriented policing is the latest in a series of management fads that have promised fundamental change, have been implemented superficially and have produced inconsistent change. Worse, the term problem-oriented policing sounds like management jargon. Problem-oriented policing appears to work when police officers think it is important.

Any change in operational policing will need the approval of local area commanders and other middle managers if they are to be effective or implemented as envisaged (Zhou et al., 1999). Problem-oriented policing is a difficult strategy to oppose, but an easy one to neglect. Can anyone say they are not, or should not be, oriented towards problems? In practice, problem-oriented policing takes its place with community and neighborhood policing as a style that is vapid rather than rigorous. This is the basic reason why partnership is so often taken to be an element in problem-oriented policing in the U.K., because both belong in the fluffy corner of the policing enterprise.

Left unchecked, efforts to convert a reactive organization into a problem-oriented one are susceptible to breakdown because they require constant, even vigilant, monitoring. Front line officers still operate largely unsupervised, with wide remits of responsibility. On the other hand, recording the extent of problem-solving efforts is difficult without becoming overly bureaucratic.

Re-prioritizing of Police Resources Is Too Easy

Police prioritize crime problems according to a variety of criteria such as risk to the public, severity and community interest. These criteria are operationalized, along with political rhetoric, by central government into performance indicators. Local idiosyncratic bureaucratic priorities are also reflected in a second set of performance indicators devised by force headquarters. The sets are combined to measure how well each local area is performing. In effect, these become a set of rods for a police commander's back. Typically, if a performance in one area is good, attention can be diverted to the areas that are under-performing. This is natural. But when resource diversion occurs frequently, policing becomes similar to a dog chasing its tail, in the sense that police attention vacillates from performance indicator to performance indicator depending on areas of poor performance. The momentum gained during the "old" set of priorities is lost as attention is focused on "new" problems. If priorities are further changed relatively quickly, no momentum is built up. Pressure to change priorities comes from headquarters, in local versions of COMPuterised STATistics (COMPSTAT) meetings (Bratton, 1998). The feedback given to area commanders varies but attention is drawn to under-performing performance indicators, irrespective of the number of performance indicators on target. While the intention is to preclude slacking off, the result is often an unrealistically high standard, where praise for good work is sparse. This is an unfortunate situation as accurate feedback is a key determinant of job satisfaction and motivation (Arnold et al., 1998:231).

The rationale for using performance indicators makes sense, but when they are applied incorrectly the result hinders effective police work. Some police forces apply annual targets uniformly across each month, despite the fact that some crime categories exhibit dramatic seasonal variation. Thus, target setting is unweighted. If crime categories have a seasonal component, target setting should be weighted according to each month's share of the total (based on historical trends), perhaps relative to that observed across the wider force area.

Pressure to re-prioritize police resources can come from outside the organization (see, for example, Scott's discussion in this volume

on police constituencies and how these can manipulate policing). Letters from elected representatives are notorious offenders, as are single-issue lobby groups. Occasionally, a high-profile incident will occur to divert police attention away from other problems.

SARAs Are Not Considered Part of "Real" Police Work

The method of problem solving widely used within police organizations is the Scanning, Analysis, Response and Analysis (SARA) model. This model is a stripped down version of the scientific method — an iterative process of testing hypotheses and rejecting or modifying them. The intention of the SARA model is to systematize the process of thought that good police officers use intuitively.

The effort and time devoted to instigating a SARA can be substantial. Even for relatively small-scale problems, the length of time spent in the scanning and analysis phases could be as much as two months. The time required for collating and analyzing crime or disorder data is considerable, even if all the information is contained in-house. Depending on how many external agencies are involved, organizing partnership meetings can add weeks to the exercise, to say nothing of the time taken in obtaining tangible agreements for collaborative initiatives.

The inevitable time buffer between conception and implementation allows SARAs to be viewed by some police officers as a delaying mechanism. The hot potato of the crime problem can be passed to a crime analyst for a few days or even weeks before returning to be delegated to someone else. With any luck the crime levels will have regressed to the mean by the time any initiative will need to be commenced. The initiative will then be "condemned to succeed" unless the evaluation is unusually careful. While this may appear overly cynical, and there is no suggestion that this is a widespread view amongst police officers, the quality of problem solving encountered by the authors, and most independent evaluators (see Read and Tilley, 2000), is extremely variable.

The time delay in the rigorous development of quality analysis tends to erode the importance of the SARA process in officers' eyes. The converse is true for police operations, a traditional facet of police work. Operations are launched when incidents exceed some threshold. To illustrate police officers' perceptions of SARAs, an example from an area familiar to the authors will now be discussed. When crime figures rose sharply recently, an operation was launched before any consideration was given to existing initiatives. When someone looked, there were three SARAs currently operating in the area. While it is apparent that the SARAs were not addressing the problem, the

operation was conceived and launched without any knowledge of what initiatives were not working.

To some, SARAs are what you do day-to-day, operations are something you do when you are serious, or when the pressure for action exceeds some threshold — in line with our assertion that problem-oriented policing implementation fails because the police do not consider it important. In further support of this, a small-scale survey conducted by the authors revealed that 77% of officers who completed the survey had not initiated a SARA in the previous six months, although those that had initiated a SARA reported being significantly more motivated by their job than those who did not $(t_{58}=2.89, p<.01)$.

Problem-Solving Obstacles (front line factors)

Critical Thinking Impacts Reactive Decision Making

Police officers find themselves in situations that require decisions to be made quickly, often in stressful environments. Therefore, methods of decision making that allow a limited range of alternatives are desirable. For this reason, officers who operate in this way seem to be favored over those who do not. The reactive nature of policing has produced police officers who tend, or need, to see problems in one dimension.

Problem-oriented policing requires officers to examine problems carefully, to separate problems into their discrete components. Most importantly, it obliges officers to devote time to working a problem through in order to save time by eliminating or reducing future incidents. Once exposed to critical thinking, one tends to notice the confounding forces which produced the observed phenomena. In other words, the multiple dimensions of problems are seen. This may retard the speed of decision making.

A slower rate of decision making, due to a more complex view of scenarios requiring deliberation, can be mistakenly attributed to indecision, which can jeopardize promotion chances. Policing is action-oriented and emergency-driven. Therefore, broader ways of thinking, largely endorsed and recommended by researchers and policy makers; appear unattractive to police officers as they feel their career prospects may be compromised by appearing less operationally competent.

This is not to say that every deliberating police officer is an indecisive wreck. Some officers are extremely adept at making decisions in an operational setting and maintain a catholic view of problems. But there are individuals who find it difficult, once exposed to analytic

ways of thinking, to make decisions at the same speed as they did in their pre-analytic life. This is not meant to suggest that reading criminological texts will be akin to a Road to Damascus experience for every police officer, merely that once a person's point of view has been modified, adjusting to an operational setting may not be straightforward.

Lack of Imagination of Responses

The variety of solutions offered by police officers to remove or reduce problems can be quite small. This would not be so bad if the solutions were effective, but there is little credible evidence to suggest they are effective in the longer term.[2] There appears to be three reasons why there is a limited repertoire of responses to crime problems. First, the understanding of the problem is not at a level at which "pinch points" (Read and Tilley, 2000) can be identified. This is usually a symptom of using police descriptions (e.g., youths causing annoyance or violence) to define problems. If problems can be defined in terms of the offending behavior that generates the problem (Scott, 2000), the analysis can be refined to a level that allows identification of pinch points.

The second reason for a limited range of solutions to crime problems is that a great deal of problem solving involves only the police. When solutions to problems are generated by the same pool of people, invariably the responses produced will have a limited range. This is one reason why partnership work is highly regarded, because, among other advantages, fresh minds are exposed to old problems. Indeed, evidence from the Home Office's Burglary Reduction Initiative suggests that the success of crime prevention action is positively associated with the number of partners involved (Hirschfield et al., 2002). Nonetheless, evidence of partnership work is often used in a superficial way to demonstrate adherence to central government dogma. Partnerships should only occur in appropriate contexts for specific outcomes. It would be counterproductive to engage in partnership work purely to satisfy the desires of interests external to a geographic area.[3]

The most important reason for unimaginative responses to crime problems is that police officers are not aware of the plethora of examples of crime prevention. In support of this claim, our survey of police officers revealed that 58% had not read any Home Office reports within six months of the survey. While we argued in the previous point that an exposure to academic thinking/critical thought can influence decision making, so too can a lack of exposure.

Inability/Unwillingness to Involve Partner Agencies

One of the strengths of problem-oriented policing is the identification of those individuals, groups or agencies best placed to deal with the factors that contribute to problem generation. Despite this, effective multi-agency work is exceptional. Reasons for the attractiveness of intra-agency work vary: everyone "sings from the same hymn sheet," activity can be scrutinized via familiar in-house information systems and the rank structure facilitates compliance. Enthusiasm for partnership work can become strained when one organization is relatively dynamic (the police) and others are incapable of matching its speed of action. Differential work speed, the rate at which decisions are made and acted upon within an organization, is arguably the most potent source of frustration for front-line officers, and management, in their attempts to tackle particular community problems.[4]

Local authority departments appear to progress slowly compared to the police, perhaps inevitably given the break-neck speed at which police organizations are obliged to operate. The time lag of response could be explained by a multitude of factors — poor communication, outdated information systems and a lack of analytical ability — none of which is limited to police agencies.

"I Don't Know" Phobia and "I Know Best" Syndrome

Crime prevention initiatives are only as effective as the accuracy of the analysis on which they are based. In other words, proper understanding of the problem is vital. This will not occur when police officers persuade themselves that they understand more about a problem than they really do. When this does occur, they either overstate their knowledge of the problem ("I know best" syndrome), which results in a set of inappropriate responses; or cannot be specific enough about underlying causes, but deliver a series of responses anyway to appease superiors ("I don't know" phobia). Both are the result of a lack of analysis.

The "I know best" syndrome is a trait prevalent in all officer ranks. A lack of appreciation for the value of analysis, a lack of exposure to quality analysis, prior experience with similar crime problems, the reactive nature of the job and personal predilections contribute to a superficial diagnosis of the causes of crime problems (c.f., Eck's [2001] comment about officers who skip the "A"s in SARA). Examples of this are abundant. Using the proximity of homeless shelters or halfway houses as an explanation for areas of high crime and disorder is a classic case. Generally the responses generated in this case

are quite specific and detailed, but they do not address the underlying causes of the problem.

"I don't know" phobia is displayed when someone is unwilling to admit not knowing the answer to a question but answers it anyway. There appears to be reluctance by *some* police officers to admit they do not know details about some feature of the problem they had not considered.[5] Whether the inability to admit a lack of knowledge is due to professional embarrassment or a lack of diligence is hard to say. They may anticipate the consequence of an "I don't know" answer: a request, possibly forceful, to find out. If this is true, "I don't know" phobia masks either laziness, insecurity regarding analysis (e.g., "I don't know and I don't know how to find out"), or a lack of interest in analytical precision. In any case, problem-solving efforts are scuppered due to individuals not being honest about the extent of their knowledge. Initiatives generated by "I don't know" phobia are usually not prescriptive enough to address the underlying causes of the problem.

For scientists, being able to say, "I don't know" is one of their greatest attributes.[6] Perhaps this is one of the contributory reasons why the widespread implementation of problem-oriented policing has been retarded; scientists are content to admit they know nothing; the excitement of discovering or empirically demonstrating hypotheses is sufficient. Police, on the other hand, insist they "know" crime and how to control it; they know about offender networks, prolific offenders, hot spots and crime trends. Yet there is a body of knowledge that suggests they do not (Ratcliffe and McCullagh, 2001; Townsley and Pease, 2002).

It needs to be stressed that we are not implying that every police officer is reactionary or too scared to admit he or she is ignorant. Many officers do decompose problems into their discrete units, untangling seemingly intertwined phenomena in imaginative ways. Others do admit they do not have sufficient knowledge to act, but know how to advance the agenda. However, as discussed above, it is important to stress that for any organizational change to be successful, officers' perceptions of the importance of accurate intelligence are paramount.

LESSONS FROM ORGANIZATIONAL PSYCHOLOGY

Fundamental changes in the way in which the police deliver services will undoubtedly require considerable changes in their organizational systems and internal structures. Unfortunately, the process of organizational change may be challenging as the task involves the

interaction of both driving and impeding forces (Lewin, 1958). For instance, although a vision for change may be identified, this may only be realized if all those involved can be motivated to embrace the new ideal. In the sections which follow, we will discuss some of the lessons from the field of organizational psychology that may inform the process that may be necessary within police forces if the problem-oriented policing ideology is to be fully embraced. Specifically, we will discuss one model of organizational change and illustrate some of the factors that are important in effecting change. Although there is a paucity of research concerned with organizational change within public sector organizations, findings from studies concerned with changes in the U.K. National Health Service (NHS) and local government will be drawn upon where possible.

Organizational psychology is a field that incorporates research involving assessment of workers (recruitment, performance appraisal), physical work environment (ergonomics, occupational health and safety), development of individuals and groups (training), employee satisfaction and nature of work and organization (organizational change and management) (Arnold et al., 1998). For the purposes of this chapter, only the change management literature is considered. We are only interested, at this stage, in making comments on the systematic approach to executing fundamental change in organizations. While the other branches of organizational psychology are useful (Lefkowitz, 1977), their relevance in the context of this article is marginal.

A Short Note on Police Organizational Change

Research into police organizational change has produced mixed results. Despite a great deal of sustained effort in making a variety of police agencies more equitable, inclusive, accountable and effective, independent *empirical* results of change programmes are sparse. The systematic application of organizational psychological methods to police organizations has occurred rarely (Zhou et al., 1999).[7] This could be in part because it is only recently (1970s) that they have begun to be applied to public sector agencies (Alderfer, 1976), and possibly because the aspects of the organization needed to be changed were perceived to be obvious.[8]

The volume of research devoted to changing police organization in the criminal justice literature far exceeds that published in organizational psychology research circles. The bulk of studies in criminal justice that describe changing an organization rely heavily on anecdotal evidence (e.g., Geller and Swanger, 1995; Seagrave, 1996; Stev-

ens, 2001). By itself, this is not terrible, but the fact that findings are not underpinned by theory weakens their utility and generalizability.[9]

Accounts of the attempts to implement team policing (Eck and Spelman, 1987; Schwartz and Clarren, 1977 and Sherman et al., 1973) and community policing (Schafer, 2000; Zhao et al., 1999) imply that a number of conditions fundamental to the concept being pilot tested were only temporarily present or not all. The importance of the change was widely held as peripheral to the mission of the organization and, as such, the exercises were under-resourced, not enough effort was exerted to bring in the structural changes required, or the project not given long enough to produce outcomes (Eck and Spelman, 1987; Zhou, 1996). The variation in the level of implementation was usually attributed to variation in management commitment to the change process (Wycoff and Skogan, 1994).

This chapter will not draw on the research published within criminal justice on the grounds that it does not explicitly communicate with a systematic body of knowledge on organizational change. Neither are we wedded to the body of knowledge derived from organizational psychology, although it informs and structures what follows. While change management may not demonstrate high rates of success (see a review of reviews in Arnold et al., 1998:485-486), and qualifiers regarding the amorphous nature of the task need to be stressed, it is, nonetheless, an attempt to collect a systematic body of knowledge about the change management process. Utilizing a relevant body of knowledge and theories will yield better results than basing a programme of change on experience or conjecture. It is perhaps ironic that scholars attempting to engineer a change process in a police agency without consulting the change management literature may be guilty of the very thing they accuse the police profession: adherence to practices that have not been evaluated.

There are two schools of thought in change management: the planned approach and the emergent approach (Arnold et al., 1998). The planned approach to organizational change describes changes that are discrete or "one-off," whereas the emergent approach describes change endeavors that are incremental or continuous. Advocates of the second school are linked more by their mutual skepticism of planned change than by a common theoretical stance. The body of knowledge for emergent change is dwarfed by that of planned change. For these reasons, the planned approach is chosen for exploration in greater detail here.

The planned approach to change derives from the work of social psychologist Kurt Lewin. Lewin was responsible for conceiving the action-research model (1946), which later led to the formalized three-step model for change (see Arnold et al., 1998), which has remained a

fundamental approach to planned change management (Lewin, 1958). Hendry (1996:624) remarks that if you "scratch *any* account of creating and managing change and the idea that change is a three-stage model which necessarily begins with a process of unfreezing will not be far below the surface" [emphasis added].

Lewin's three-stage model (1958) of organizational change comprises the following steps:

(1) *unfreezing* the present way of working,

(2) *changing* to a new way of working, and

(3) *re-freezing* the new way of working.

Unfreezing involves challenging the existing way of working and demonstrating that it is no longer suitable in the current context, with the primary motivation of creating a readiness for change. To achieve this aim, the model contends, it is important to show that some salient goal remains unmet, or that an ideal is not fully realized. In policing, one approach for a change to problem-oriented policing would be to convince officers that mostly reactive styles fail to address the underlying causes of crime, and to challenge the common perception that the role of the police is to simply "catch the criminals." The literature attributes many organizations' failure to realize change to unsatisfactory completion of the unfreezing process (Schein, 1987). Unfreezing is held to be easiest when the organization is in crisis (Goldstein, 1990). There is, of course, the danger of circularity in the argument that failure to change is attributable to incomplete unfreezing, emphasizing the need for unfreezing to be measured adequately and independently of change success.

Unfreezing refers to the perceptions of individuals. Communicating a rationale for organizational change to individuals is essential if it is to be successfully implemented. Moreover, each stage must be achieved by all involved rather than senior management only — although the latter must be seen to believe in and actively lead the new style of working.

A formula developed by Jacobs (1994) is useful for conceptualizing readiness to change:

$$D*F*V>R$$

Where   D=Dissatisfaction with the current situation;
V=Vision of what the future could/should look like;
F=real and achievable First Steps people can take toward the vision, and;
R=Resistance to change.

The key point of the formula relevant to problem-oriented policing implementation is that the product of D, F and V needs to be greater than R for change to occur. If D, F or V are absent, the organization

will not change, regardless of the levels of the complement arguments of the formula.

Once the unfreezing phase is completed, the focus of the change process turns to articulating and demonstrating the new method of operating. The Lewin model requires identification of behaviors central to the new style of working. In policing, while the overall vision of problem-oriented policing is clear, the individual implied behaviors under problem-oriented policing must also be.

For this process to be comprehensive and substantive, it is essential that the specific aims and objectives be clarified, and that suitable management and internal structures are developed. For instance, research concerned with organizational change in local government in the U.K. has highlighted the problem of focusing on externally-driven agendas without addressing the need to establish the appropriate infrastructure. Asquith (1997) examined the extent to which organizational change was realized in eight local authorities. Local authorities that had carefully identified organizational aims and objectives, and that had an appropriate and flexible operational management designed to achieve them, were those for which change had been most successful. Thus, while it is important to focus on the vision of the organization, it is also essential to develop the necessary systems and internal structures which ultimately facilitate organizational change.

If a defining characteristic of problem-oriented policing is its being evidence-based, it would be necessary to ensure that adequate resources are allocated to intelligence units so that different forms of evidence can be assembled and triangulated, and that the members of these units acquire "problem-oriented policing heads": i.e., ways of organizing the data optimal for problem-oriented policing-derived analyses. How are "problem-oriented policing heads" acquired? It would be important for staff with the right experience and qualifications to be recruited for intelligence posts. Alternatively, in keeping with the first steps advocated by Jacobs (1994), the appropriate training should be provided.

There will be resistance to change. Officers may be fearful of losing their jobs, being swamped by work or being unable to carry out their new roles, concerns that were expressed by staff during reforms of the NHS during the early 1990s (e.g., see Deluca, 2000). For such reasons, potential problems should be anticipated and appropriate counter-moves implemented. For instance, funding may be allocated to provide training or education to assist officers in carrying out their new roles. Ensuring that officers are confident in their continuing competence is crucial if they are to embrace the new way of working.

Rumors and gossip abound in police environments. These may subvert any of the three change phases. Layton et al. (1998) stress the importance of communication of facts throughout the process. Research conducted by the Wyatt Company in the United States involved asking 531 organizations what they would change about the way they implemented organizational change. The most frequent answer was "The way I communicated with my employees" (cited in Garside, 1993). Moreover, a small scale survey (N=60) conducted by the present authors indicated that police officers' degree of motivation in their roles was (significantly) positively associated with the extent to which they perceived information to be communicated effectively, a finding also reported in a study of nurses by Davidson et al. (1997).

A further important consideration during this stage is that of maintaining the momentum generated during the early phase of implementation. A clear problem is reversion to the old ways of doing things. In fact, a review of change within the NHS cited commitment and conviction for the project from the chief executive and senior clinicians and management as the most important factor in its success (Garside, 1993).

It is important that senior management is constantly seen to support and be enthusiastic about the new way of working. Clearly, to do this, it is necessary to convince them of the benefits of the new approach so that they advocate it rather than simply paying it lip service. Arnold et al. (1998) cite an example from private industry. A company introduced a new computer system. Its previous experience of implementing changes had identified difficulties with senior management and production supervisors. As the full endorsement of these two groups would be essential if changes were to be properly implemented, the company specifically targeted these two groups. Both groups received extensive training on the computer system beyond that required. The aim of this exercise was to make them fully aware of the capabilities of the system and the problems associated with implementing the changes. The result, as described by the project manager, was "remarkable." Thus, one of the key factors in implementing changes is in convincing those who lead the organization of the benefits of the new way of working.

Having changed the current way of working, the final stage of Lewin's model is that of re-freezing, the aim of which is to solidify the revised practices. The challenge is to ensure that the organization really has adopted the new way of working, rather than simply giving the illusion of embracing it. People or organizations apparently tend to revert to the old style of working immediately after the process of change has been implemented and there is no one to monitor their

behavior. The process of refreezing may be particularly difficult if the work environment does not appear to support the new vision, although this difficulty will be in indirect proportion to how well the first two steps have been executed. For instance, problem-oriented policing strategies may take some time to yield significant results. Even when these techniques may be more sustainable than traditional policing because they seek to address underlying causes, officers may become disillusioned with the approach and revert to more uniformly reactive forms of policing believing these to be more immediately effective.

Unsurprisingly, the process of refreezing is frequently achieved through the use of positive feedback regarding the effectiveness of the new practices. Successes need to be emphasized and the long-term effects of the new styles highlighted and contrasted with the problems associated with the old style. Senior management needs to remain clear on, and promote, the benefits of the new style. This may involve the acknowledgement of the fact that changes may take some time to impact upon measures of success, especially traditional performance indicators such as simple counts of crime. Thus, it would be wise to develop alternative ways of reacting to changes in performance indicators in the short term to discourage officers from becoming disaffected with the new style simply because they, and their superiors, have unrealistic expectations of the successes that may be achieved in the short term. Indeed, one of the problems with both the Lewin model and SARA is the illusion that it is a one-off process, rather than an iterative process approximating ever more closely to an optimum.

HOW TO TACKLE OBSTACLES

The following section contains a number of remedies to the barriers to implementation identified in the preceding sections. Each aims to mitigate the influence of one or more of the implementation barriers. The ideas presented here are consistent with the lessons distilled from the previous section. They therefore have the advantage of drawing on systematized experience, but remain provisional.

Utilizing Performance Indicators in a Positive Way To Leverage Action

Problem orientation can be fostered through the use of performance indicators, but not the way these indicators are traditionally employed by police organizations. Most performance indicators are counts of criminal matters and detection ratios.[10] These make sense

only to police organizations and central government, the latter purely from a motive of wanting less crime and more detections (at least up to the point when the courts are overloaded and the prisons full). Police officers attempting to engage either subordinates or external partners usually point to crime levels and try to argue the other party into action. We feel that this is an ineffective technique, and other methods are available which would provide greater possibility of action. Two examples are provided here. Both are designed to be more meaningful to their intended target audience than orthodox crime counts.

Problem identification can be enhanced by the use of the "number of officer hours" statistic.[11] This is calculated by aggregating the signing on and off times for incidents to which officers respond. A matrix of places against incident types can be constructed to compare how much time is spent by officers at a location (for all crime), on particular crime types (at all locations) or specific problems at certain locations. The cell entries can be simple summations of time elapsed, or rates or weightings could be applied to the number of hours (hours per officer, hours per incident). Table 1 is an example of such a matrix using one month of patrol deployment data.

Table 1: Observed Officer Hours for One Month

Call type	Area 1	Area 2	Area 3	Area 4	Area 5	Area 6
Minor disorder	62.15	98.17	107.55	101.42	27.28	46.73
Susp indiv.	16.25	45.15	29.20	44.02	16.97	18.15
Traffic accident	39.15	36.87	10.40	21.42	5.33	8.75
Abandoned car	20.73	27.70	11.62	6.27	16.52	10.82
Other theft	13.95	25.55	20.02	10.87	11.98	2.87
Found stolen car	3.47	11.62	19.95	18.28	23.78	5.53
Other	2.95	29.62	31.00	8.60	5.48	2.32
Dom. Violence	12.30	22.73	18.18	12.17	6.40	5.75
Stolen car	21.32	19.67	9.50	5.87	7.92	3.07
Assault	0.80	9.97	21.45	1.90	19.18	4.13
Burglary Dwell	12.67	3.97	21.23	2.75	12.95	2.33
Misc. (46 call types)	53.00	190.52	90.05	89.08	103.62	64.62
Total	274.32	523.88	400.63	334.25	268.87	177.33

The cell entries are the summation of observed officer time spent on calls. Shaded cells indicate where the observed amount of officer hours is greater than the expected number of officer hours (calculated using marginal row and column totals). The cumulative time represented by the shaded cells is over 130 officer hours per month. This equates to an extra officer for three weeks out of four.

Table 1 naturally elicits questions about resource allocation. These will vary depending on whether a manger is convinced of the merits of problem-oriented policing (i.e., if they've been "unfrozen" or not). Frozen managers will compare the picture presented with their expected resource allocation. Pointing out the number of repeat calls, and the amount of time expended responding to these matters, will further force managers to realize current practices are wasteful and ineffective. Most importantly, it provides objective proof of recurring incidents and the need to address them.

The power of the "number of officer hours" statistic is that the units used are the hard currency of police managers. In other words, it is in the manager's best interest to "reclaim" more officer hours from recurring problems. This can be done by solving or alleviating problems identified by the statistic. For managers unable to see the benefits of being problem-oriented, the "number of officer hours" statistic provides an excellent impetus to focus on problem resolution or reduction. In other words, problem orientation becomes the route through which one must pass to proceed from an undesirable situation (lots of officer time spent at a few addresses) to a desirable one (less officer time devoted to preventable calls). Thus, problem orientation can be marketed as relevant, and therefore important, on the grounds that repeated preventable incidents tie up officers and compromise their ability to respond swiftly in the event of a real emergency. This is a desirable goal not only for the community, but also for officer safety.

Unfrozen managers, those who have accepted problem-oriented policing in principle but do not know where to begin, will use the table as a scanning tool (in the SARA sense). The analysis cannot be gained from the matrix, but it is an excellent management tool that restricts a reader's attention, objectively, to problems that deserve further exploration. This form of demand profile can be extremely illuminating for police managers as a starting point for identifying problems.

When dealing with other agencies or groups, the "number of officer hours" statistic will buy little support. The same can be said of using crime counts as a means of engaging partnership work. For audiences external to the police agency, performance indicators are required which individuals will understand and be motivated by. One

approach that does gain support relatively easily, particularly among taxpaying residents, is calculating the cost of crime and disorder incidents for the community. This could be done by quantifying the financial cost to the police of the calls generated by particular addresses, with a footnote implying that better use could be made of public resources, or the financial cost to society as a whole. Comprehensive models of economic costs of crime and techniques for calculating meaningful cost-benefit analyses (see Mallender et al., 2002) are being developed (Brand and Price, 2000) and should be used by police organizations as a means of gaining support from external agencies (examples of intra-agency support through this tactic also exist, see Queensland CriminalJustice Commission, 1997).

In Green Bay, Wisconsin, police officers identified a number of bars that did not observe proper serving practices and served intoxicated individuals who had extensive histories of public drunkenness. Common opinion was that a homeless shelter in the area was responsible for problems at the bars in the area. Closer examination of the incidents revealed that the two bars closest to the shelter — both were equidistant — displayed dramatic differences in calls for police service. In order to persuade the city council of substandard serving practices at particular bars, the officers, rather than presenting the volume of calls for the two bars, quantified the total time spent responding to calls for both bars and multiplied this by the hourly cost of police services. These figures greatly impacted the council's decision not to renew a number of licences (Bongle, 2002). [12],[13]

Expressing the impact of offending behavior in financial terms is a powerful persuader for potential partners to provide support because it is easily understood, has more impact than counts of crime and is easily calculated.

Body of Knowledge

This section deals with two types of knowledge: parochial and catholic. Parochial knowledge encompasses crime analysis and crime reduction initiatives performed at the local level, along with a set of useful contacts from other agencies and the community. Intelligence on what contextual factors differentiate one area from another is of paramount importance. Catholic knowledge consists of the universe of criminological research applicable to crime reduction.

In a perfect world, the list of problem-solving initiatives (e.g., SARAs) put into action comprise the body of parochial knowledge. Unfortunately, routine documentation of initiatives is generally not of sufficient quality to be used by other individuals. The valuable minutiae of specific problems seem to exist almost exclusively within the

memory of the officer involved. Much relearning occurs within an area when problems recur and effective prior responses are forgotten. Without the systematic collection of parochial knowledge, areas are reliant on the presence of individuals involved in problem solving in the past.

A frequent comment made of the criminal justice system, and of the police in particular, is that little is known about what procedures are effective. Until recently, little scrutiny of established practices occurred, but there is now a great deal of activity invested in the development of evidence-based policy and practice. Adding insult to injury, however, are instances when effective practice exists but front-line officers are oblivious to it. As Davies and Nutley (2002) argue, the creation and development of a cumulative body of knowledge will only serve a purpose if there is effective dissemination and access to knowledge as well as a means to increase the uptake of evidence-based practice.

Much work has served to build up a body of knowledge about what is effective in reducing crime. One of the earliest attempts was the ambitious "What works, what doesn't and what's promising" report commissioned by the U.S. Congress (Sherman et al., 1997). The U.K. Government has specified "evidence" as one of the central characteristics of policy, one of the results of which are the Crime Reduction Toolkits — interactive templates for specific problems authored by experts to be used by practitioners. In a similar vein, but more comprehensive, are the U.S. COPS Problem Oriented Guides for Police series. The Campbell Collaboration, a collection of systematic reviews concerned with social policy, but primarily criminal justice, has been founded in order to advance the dissemination and uptake of evidence-based policy and practice.

So far, our experience relates only to the extent that police officers use the Home Office Crime Reduction Toolkits.[14] Officers are grateful for the resource, but they are not using them as they were envisaged. Generally a problem only appears on their radar at the last minute, when they need to devise an approach to tackle a problem in a very short space of time. Proper use of the toolkits requires a substantial period of time, which is often unavailable to police. This is not a criticism of the toolkits, just an operational reality for police officers.

A potentially more effective way to disseminate the results of systematic reviews would be to incorporate the existing knowledge of "what works" within an expert system. Expert systems are a programming paradigm based on "rules of thumb" and are typically used as diagnostic tools. A series of closed questions is put to a user and the answers are matched against a suite of symptoms. Once a match is found, the database of remedies is cross-referenced and supplied

to the user. Common applications of rule-based tools are found in medicine, industry (machinery failure) and finance (mortgage applications, asset management). The likely reason that expert systems have not been applied to police problems is that it has only been relatively recently that a body of systematic and reliable knowledge has been compiled.

Using such a system, police officers would answer a set of questions about the problem they seek to address. At the end of the process they would be given a set of applicable initiatives that have been demonstrated to work elsewhere, with hypertext links for literature or contact information of involved individuals. If there are no appropriate initiatives, perhaps secondary analysis of an appropriate victimization survey could provide a starting point (risk levels of vulnerable groups, say).

The strengths of such an application would be: (a) that officers would be prompted to think of aspects of problems they may not have considered otherwise; (b) it would be the equivalent of having a problem-solving expert "on demand;" (c) much of the work has already been done (expert systems are not difficult to programme and we are beginning to know "what works"); (d) it would be a comparatively quick problem solving exercise compared to the toolkits; (e) it would be as explicit and context-oriented as desired without forcing the user to become too academic; and (f) it could be used by agencies other than the police (crime and disorder partnerships, for example). In other words, not only would the quality of problem solving be heightened, but the process would also be made simpler and more straightforward.

Making Promotions Problem-oriented Policing-based/related

A method of positively reinforcing organizational change is to restrict career advancement to only those individuals who exhibit attributes consistent with the stated organizational vision. This means that an area commander who wishes to instill the need for problem orientation in other officers can achieve this by making problem-oriented policing the route through which one must pass to be promoted. To be promoted to any rank, two things need to be demonstrated (in addition to the existing set of characteristics and qualifications): a thorough understanding of the problem-solving policing ethos, along with evidence of problem-solving participation. Making these two a requisite condition for applying for other posts transforms problem orientation and solving from a vague notion or activity into a relevant and attractive one, and provides encouragement to translate a vision into reality. Once officers deem problem-solving

policing important, more attention will be devoted to identifying and dealing with the conditions which give rise to groups of similar incidents.

Two important qualifiers should be stressed. First, a policy of this sort would obviously need to be widely promoted so that officers were aware of the importance that management places on problem-solving policing. Second, the problems listed in the first organizational obstacle (rapid turnover of staff) need to be kept in mind, as it would be counterproductive to lose quality staff continually. The recommendations of the collection of local bodies of knowledge (see the second solution of this section) would be applicable here.

Training Sessions

An explanation for the slow penetration of critical thinking into everyday police work is that reactive decision making becomes compromised by exposure to wider perspectives. The more options available, the greater the deliberation; so the theory goes. However, rapid decision making is not restricted to the police. Astronauts, the military, pilots, surgeons and emergency rescue workers all need to make decisions in stressful situations, involving large amounts of risk. In these careers, the margin for error is mostly infinitesimal.

The difference between the careers mentioned above and the police is that the former group routinely undergoes strategy and review sessions in an attempt to learn more efficient methods of operating or to highlight critical errors. These simulations might involve hypothetical scenarios and provide the luxury of assessing the situation from a variety of perspectives. In this way, the "heat of the moment" factor is taken out of the decision-making process. Other features of routine "re-training" sessions are overviews of basic theory complemented by emerging developments.

Professional sports teams also regularly review tactics and strategy. Geller (1997) provides a neat comparison between the police and professional football teams. Analysis of games (opponents and themselves), learning new set plays (often tailored to exploit a particular weakness of the opposition), and training out poor technique comprise a considerable amount of time compared to the time spent using that knowledge. The motivation for professional sports teams to constantly monitor, adapt and improve performance is largely financial, a motivation inapplicable to police organizations.

If police organizations ran a problem-solving policing retraining scheme, similar to the ones that other professionals oblige their members to undertake, for all front-line officers on a frequent basis, basic problem-solving policing principles would be reinforced, prom-

ising developments could be highlighted and case studies of problem solving could be scrutinized. This would keep the body of professional knowledge of crime reduction more up to date than the current situation and allow some evolutionary learning to occur. More importantly though, the allocation of time to re-training would reiterate the organization's commitment to problem solving policing. Regular training courses are only offered for those skills which are considered important, either for officer safety or litigation minimization. By stipulating retraining as compulsory would raise the status of problem solving considerably.

CONCLUSIONS

Clearly, if police organizations are to become "learning organizations" (Geller, 1997), there is much ground to cover. The present philosophies and set of priorities adhered to by police forces are not consistent with problem solving policing, at least as advocated by Goldstein (1990). We have tried to avoid sounding pessimistic at the evidence of sporadic and isolated instances of rigorous problem-oriented policing despite police organizations' universal espousal of the merits of problem-oriented policing. In this vein, it should be of perverse comfort to researchers and practitioners that other fields struggle to make substantive ground toward routinizing evidence-based practice. Medicine, with its high educational entry standards, numerous journals, and requirements for practitioners to keep abreast of the latest developments and procedures, suffers from similar orientation obstacles as the police (Goldstein, 1990; Scott, 2000; Sherman, 1998).

The field of organizational psychology is a potentially powerfully source of information for how best to engineer fundamental change within organizations. To our knowledge, this literature has not been explicitly consulted for the purposes of implementing problem-oriented policing, at least not on a routine basis. In this article, we have outlined Lewin's model for change, which has been proved to be effective for a variety of organizations, including those in the public sector. The model consists of a three-step process of justifying a basis for change, recalibrating the organization to reflect the new vision, and reinforcing the new vision. The feature common to each process is effective and targeted communication.

Proposals for change will be best received when they are expressed in terms that are consistent with or reinforce principles considered important by officers. In the unfreezing process, for example, to persuade officers into acknowledging the need for a new vision, appeals should be delivered in such a way that they do not conflict

with the police subculture (Goldstein, 1990; Reiner, 1985). Resistance to proposed changes will also be minimized if the benefits of the new vision can be directly related to eliminating or alleviating conditions that are universally unfavorable to officers (such as too many calls for service, or not enough officers).

Obstacles to the widespread implementation of problem-oriented policing were partitioned into two groups, based on the level at which they operated. The obstacles were interdependent, but there are opportunities to exploit this mutual reinforcement. A number of remedies for obstacles have been discussed, each directly addressing one of the stated obstacles with an anticipated "diffusion of benefits" for weakening other obstacles.

Two recurring themes emerged in this article: (a) police officers will not devote much energy to activities they do not consider important, and (b) effective communication will mitigate many of the obstacles that have bedeviled other problem-oriented policing projects. Widespread, substantive implementation of problem-oriented policing is possible, but will not occur until senior officers are psychologically committed to substantive change and are willing to develop a comprehensive communication strategy to supplement the intended changes. By clearly justifying a reason to change, communicating methods of problem solving and developing systems that reinforce good practice, a system of disseminating successful problem-solving initiatives will place the police much closer to the Goldstein ideal of problem-oriented policing. In short, the path of least resistance for orchestrating an organizational shift involves clearly emphasizing, through communication and promotion, how the new paradigm is consistent with, and will provide greater attention toward, that which officers deem important.

If problem-oriented policing is to be truly implemented throughout an organization, not just "bolted on" or restricted to small subunits of the agency as has occurred in the past, then advocates need to concentrate their energies into "changing" rather than "change."

♦

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NOTES

1. The term problem solving implies that problems are always eliminated. Use of the term restrictively could raise the bar too high. Eck and Spelman (1987) outlined five possible results of problem solving: elimination, reduction in volume, reduction in harm, better processes to deal with the problem, and assigning responsibility to other agency or group.

2. During a review of problem solving in one neighborhood, the bulk of the initiatives consisted of only two tactics: (i) high visibility police for a period of about two weeks, and (ii) the production and dissemination of crime prevention literature in the area.

3. Exceptions exist of course. Offenders who reside in one jurisdiction but offend in another create a thorny problem.

4. As a wit once remarked, police organizations operate with the philosophy "Ready, Fire, Aim," and local governments operate with the philosophy "Ready, Aim, Aim, Aim...."

5. To illustrate, we have encountered a number of SARAs dealing with auto crime, which includes such offences as theft from motor vehicles, theft of motor vehicles, and unlawful taking of motor vehicles. The problem here is that auto crime can describe joyriding, acquisitive crime, professional car theft (parts or "ringed" vehicles) and even insurance fraud. The responses generated rarely reflect the range of problems present.

6. Richard Feynman, Nobel prize winner in physics and considered to be the greatest physicist in the second half of the twentieth century, gave three public lectures in 1963 regarding science and society. A great deal of the first was devoted to the "nature of science" and the existence of doubt and uncertainty within its practice. In it, he proposed that a sci-

entist's ability to admit ignorance was a powerful tool. He claimed that, "to solve any problem that has never been solved before, you have to leave the door to the unknown ajar... Because we have the doubt, we then propose to look in new directions for new ideas" (Feynman, 1999:26-27).

7. Exceptions exist, notably Langhoff (1982), Tan and Heracleous (2001) and Wilkinson et al. (1996).

8. This may be true, but executing the necessary adjustment is where organizational psychology could most contribute to a programme of change.

9. The uniqueness of a police organization is taken as given by researchers, yet there is no evidence that factors contributing to resistance to change are exclusive to the police.

10. Repeat victimization is an obvious exception.

11. Credit for this concept should go to Sgt. Paul Firth, of North Wales Police.

12. The number of calls did not include those made from inside the bar. The officers wanted to avoid the owners thinking they would be penalized if they asked for police assistance.

13. Several other approaches were made to convince the council not to renew licenses, such as encouraging residents to attend meetings and voice concerns over license renewal.

14. See: www.crimereduction.gov.uk/toolkits/index.htm.