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**A Framework for Conducting Annual Community Safety Audits:
an In-House Methodology for Police Departments**

Joseph Clare and Darryl Plecas

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ABSTRACT

This paper proposes a framework by which police departments can undertake in-house, annual community safety audits. This methodology proposes a twelve-month, iterative process, which commences with the police department triangulating (a) a range of routinely-collected police data, (b) the findings of an audit of local fear generators, and (c) the results of a community safety survey. Utilizing a problem-oriented policing framework, the output from this community safety audit would enable subsequent policing activity to target the greatest sources of community safety concern. By implementing this process on an annual basis, police would have a sustainable, reliable strategy for monitoring community safety variations over time and for staying in touch with the concerns of their local community.

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Overview

The objective of this paper is to provide a detailed framework for a methodology that police departments can utilize to monitor community safety. This approach would enable local governments to audit this issue in a sustainable, repeatable, consistent manner, thus assisting with reporting requirements and performance review. Furthermore, this process would enable police managers to target policing resources towards the areas of greatest safety concern within their communities.

Initially, this paper specifies a definition of the term community safety, which is informed by international approaches to this concept and also maintains a focus on the scope and objectives of policing. Following this, a method for monitoring community safety is proposed that involves a 12-month iterative cycle for triangulating a combination of (a) routinely-collected police data (including recorded crime data, calls for service data, non-crime calls, and police contacts), (b) the outcomes of an annual audit of fear generators, and (c) a community safety survey of residents to identify specific community safety concerns. This process builds on international best-practice advice with respect to measuring crime, whilst maintaining an awareness of the logistical restrictions within which police departments typically operate. This paper then provides a summary of how the results of this community safety audit could be utilized by police departments to guide initiatives designed to address these community safety concerns through a problem-oriented policing approach.

Defining Community Safety

Despite the volume of academic and political activity directed towards enhancing and monitoring community safety (e.g., Faulkner, 2009; Loveday, 2006; Raikes, 2002; Whitzman & Mayes, 2005; Whitzman et al., 2006), it is important to acknowledge from the outset of this paper that, “Internationally, there is no

consensus as to the basic definition of ‘community safety’, much less how to achieve governance goals related to community safety” (Whitzman, et al., 2006, p. 6). In discussing this definitional issue (and using this term interchangeably with ‘community security’) a report by the United Nations (2009, p. 14) explains how a narrow understanding of this concept can focus on “group and personal security” and “ensuring that communities and their members are ‘free from fear’” while a broader understanding can expand to “include actions on a wider range of social issues to ensure ‘freedom from want’”. Whitzman et al. explain that, while across community safety definitions a range of factors from crime and insecurity to injury prevention (including injury caused by natural disasters) are considered, the only consistently retained factor involves violent crime victimization. In addition to this, from a measurement perspective, there is very little consensus or direction regarding neither how to establish community safety baselines nor how to monitor the impact of strategies designed to enhance community safety (Whitzman, et al., 2006).

Given that the objective of this paper is to enable police departments to complete in-house, annual community safety audits, a definition for community safety is required that has direct relevance to a local policing context. Therefore, an appropriate definition for community safety would focus on the relative levels of activity that fall under the scope of the police that directly influence the safety of the community members. For the purposes of this method, it is crucial that metrics are identified that provide insight into these activities, which can be measured by the police in a consistent, logistically-feasible manner, and can be used to drive policing activity anticipated to enhance safety levels within the community. The following section proposes some potential metrics that could be used to monitor this definition of community safety.

Triangulating Data Covering Aspects of Community Safety

In an exercise designed to identify potential safety measures that could be used to evaluate patient safety within a hospital context, Pronovost et al. (2006) identified a list of essential elements that all selected metrics should possess. These included: (a) importance to the organization, (b) validity (how representative they were of safety), (c) reliability over repeated measurement, (d) feasibility within existing organizational constraints (e.g., cost of collection – monetary and

personnel), (e) usability and usefulness for the people who will be expected to utilize the data to drive safety improvements, and (f) universal applicability across the organization. To this end, the following sections outline three main categories of metrics that could be triangulated to monitor community safety as defined above. These are routinely-collected police data, an audit of fear generators, and the findings of a sampled community safety survey. The specific combination of the metrics that are selected within each of these categories would have to be determined by each police department as a function of importance, usability/usefulness, and applicability, as outlined above (Pronovost, et al., 2006; Whitzman & Mayes, 2005).

Before explaining how this interpretation of community safety could be measured, it is important to briefly clarify two points. First, this methodology is designed to be implementable by police departments, and as such, should not require large-scale input from academics. Second, as the focus is to utilise an operational-focused definition for community safety that can be measured and implemented to guide policy and practice, this methodology is not designed to attain the level of scientific rigor that would qualify a research study for inclusion in a Campbell Systematic Review (e.g., www.campbellcollaboration.org). This said, it is the intention that the findings of this approach to measuring community safety would provide a set of metrics that could simultaneously be compared longitudinally and used to identify specific factors that negatively influence community safety. As is discussed later in this paper, it is anticipated that this additional knowledge about specific community safety issues could then be utilized to design methodologically-rigorous initiatives aimed at ameliorating these safety concerns.

Routinely-Collected Police Data

The first type of data that should be collected as a part of this triangulation methodology involves aspects of routinely-collected police data that will provide insight into community safety as defined above. It is important to emphasize from the outset that this type of data forms only one component of the overall approach to measuring community safety. This is essential, given the large body of research undertaken that has drawn concerns about the validity and representativeness of police recorded crime data when analyzed in isolation, where these concerns have

been motivated by factors such as under-reporting of victimization and the influence that police activity has on the outcome of the recording process (e.g., see Clare & Morgan, 2011; Hough & Norris, 2010, for a discussion of these issues). Given this data forms part of a broader audit of community safety, and that the focus of this exercise is not specific to victimization, these concerns do not preclude the use of these measures. Furthermore, the inclusion of routinely-collected police data is consistent with the broad objective of this approach: namely to provide a valid, logistically-feasible, and timely approach to monitoring community safety in-house.

Table 1. Police data types, specific crimes, and denominators for rate calculations

Major data type	Specific crime	Denominator
Acquisitive crime	Motor vehicle thefts	Total number of motor vehicles in the jurisdiction
	Thefts from motor vehicles	Total number of motor vehicles in the jurisdiction
	Break-and-enter (commercial and residential properties)	Total number of properties (commercial and residential separated) in the jurisdiction
Violent crime	Assaults	Total population in the jurisdiction
	Domestic assaults	Total number of dwellings in the jurisdiction
	Assaults on police	Total number of officers in the jurisdiction
Contact with police	Arrests with force required	Total arrests in the jurisdiction
	Negative juvenile contacts with police	Total contacts made by police in the jurisdiction
	Negative police contacts with known prolific offenders ¹	Total contacts made by police in the jurisdiction
	Negative street checks/curfew checks	Total street checks/curfew checks in the jurisdiction
Calls for service	Noise complaints	Total calls for service in the jurisdiction
	Drug overdoses	Total calls for service in the jurisdiction

¹ As part of the Criminal Justice Reform Projects being undertaken by the British Columbia provincial government, a Prolific Offender Management Project was launched in some areas in 2008. This project involved a small group of known prolific offenders who experienced increased supervision and timely intervention from law enforcement and other specific public services. Further details are available at http://www.criminaljusticereform.gov.bc.ca/en/justice_reform_projects/prolific_offender_management/

A range of potential metrics that could be extracted from police data are displayed in Table 1. It is clear from this table that these move beyond focusing on recorded crime, and are also attempting to summarize variations in other types of policing activity that could provide insight into community safety concerns. In all cases, rather than reporting absolute numbers for these measures, it would be advisable to calculate rates per unit of the population. For example, for reported break-and-enter records, this value should be divided by the number of properties within the policing jurisdiction according to official records at the time: e.g., 800 offences reported and 60,000 dwellings, would translate to a rate per 1,000 dwellings of 13.3 ($800/60,000 \times 1,000$). This approach produces a recorded crime rate that takes into account variation in population size over time, meaning that numbers between years can be compared (see Kirkwood & Sterne, 2003, for further approaches to comparing rates). The same approach should be followed when counting each of the other recorded crime values, adjusting the denominator in the rate calculation to reflect the population being examined. In addition to this, there would be a lot of value in mapping this activity, to identify where the spatial clustering occurs with respect to concentrations of these incidents.

Auditing Fear Generators

The fear of crime research is plagued by the absence of a clear definition of this concept: a situation that Fattah (1993, p. 45) suggests as a consequence of, “the insurmountable problems of trying to come up with a clear, accurate, and easy to operationalize definition of what is in essence a basic human emotion.” There are complications with fear of crime as a concept and related to the methodologies involved with the collection and estimation of this factor (Fattah, 1993). To avoid entering into this debate, the focus of this work is on individuals’ context-specific, cue-focused concerns about victimization (which Warr, 1990, p. 891, described as, “central cues that evoke fear of victimization”) rather than a global fear of crime. This distinction is aptly summarized by Ferraro and LaGrange’s (1987, p. 76) statement that, “People have perceptions of their risk of victimization; however, the perceived risk of victimization is vastly different from the feeling of fear of victimization.” This approach mirrors the focus applied by Gabriel and Greve (2003, p. 601) who investigated, “actual fear as a momentary affective state that varies within a person according to the situation at hand,” which they suggest

consisted of three elements: (a) an individual's cognitive awareness of threat, (b) a subsequent affective experience arising from the cognition, and (c) an appropriate behavior, consistent with the underlying motive or action tendency.

Brantingham and Brantingham (1997) developed a typology for categorizing characteristics of the environment that could increase the sense of risk, which they termed 'fear generators'. The assumption of this typology is that these characteristics emerge as a consequence of the interaction between the individual and their immediate environment. Brantingham and Brantingham proposed that these dynamic factors, which are directly related to the situational-dependent concerns about the context-specific risk of victimization, can be caused by the following: (a) inadequate/incomplete environmental knowledge, (b) presence of threatening people, (c) physical signs of trouble, (d) inadequate choices with respect to movement, and (e) isolation. As a function of the interaction between the individual and their environment, these factors can appear in varying combinations. With respect to the community safety objectives of this paper, the ones that will be focused on when undertaking a fear generator audit within the policing jurisdiction concern the presence of physical signs of trouble and threatening people.

Moving beyond the police recorded crime types of incidents that have already been considered for analysis, this component of the triangulation methodology will focus more in 'incivilities': which in this context represent "low-level breaches of community standards that signal erosion of conventionally accepted norms and values" (LaGrange, Ferraro, & Supancic, 1992, p. 312). These types of events do not reach the threshold for even relatively minor criminal offenses such as petty theft and assault. There are two broad types of incivilities that will be focused on: (a) physical incivilities, which define disorderly physical surroundings such as vandalism, graffiti, and abandoned cars, and (b) social incivilities, which directly relate to disruptive social behaviors including public drunkenness, loitering youth, and the presence of threatening people (LaGrange, et al., 1992). Recent research undertaken in Swedish communities identified these types of factors to significantly influence safety-related concerns of surveyed residents (Kullberg, Karlsson, Timpka, & Lindqvist, 2009).

Table 2. A list of potential physical and social incivilities that could be counted when auditing fear generators

Physical incivility	Social incivility
Vandalism	Public drunkenness
Graffiti (public and/or private property)	Loitering youth
Abandoned cars	Aggressive pan-handling
Discarded needles	Sex-trade workers
Illegal dumping	Public drug-use
Boarded-up properties	Homeless people
Condoms on the ground	

The collection of this data should be undertaken as follows. First, the time period during which this data is being collected should be controlled and second, the areas of the policing jurisdiction need to be clearly divided up and allocated to officers to avoid double-counting. An example of a fixed period of time that would provide a useful window into this would be a 1-week period, during which officers would count the frequency at which they observed any of these fear generators within the specific area that they had been allocated. The counting approach in this case could be as simple as recording the frequencies of all of these types of fear generators while going about daily policing activity in the area, or could be undertaken by allocating specific time for specific officers to undertake a comprehensive review of the specific geographic area. The relative frequency (as a proportion of the total incidents across the policing jurisdiction) could then be calculated for each geographic area from which data was collected, to give a relative distribution of the size of this issue across space. The range of types of data that it is proposed could be audited during this process are listed in Table 2 (which builds on the questionnaire framework developed by Mosca & Spicer, 2008).

Measuring the Public Perception of Community Safety Issues via Surveys

Every member of the community will pose a unique cognitive map, which summarizes the specific cognitive awareness space that has developed as a consequence of their day-to-day movement around the policing jurisdiction (P. L.

Brantingham & Brantingham, 1984). As a function of this legitimate movement, which will vary as a consequence of individual factors such as age, sex, employment status, hobbies, and so on, individuals will potentially encounter fear generators (as mentioned above). In addition to this, they will also likely become aware of crime generators and crime attractors (P. L. Brantingham & Brantingham, 1995). As is explained by Chainey and Ratcliffe (2005) crime generators are areas that draw large numbers of people for legitimate reasons, thus ensuring a large number of potential targets for criminal activity congregate in a predictable temporal and spatial context (e.g., malls and transit hubs), while crime attractors are places that create criminal opportunities, such as red light districts, and consequently attract motivated offenders.

As a consequence, the third component of this triangulation methodology, the survey component, aims to provide respondents with the opportunity to draw attention to additional information about fear generators, crime generators, and crime attractors. This component of the triangulation methodology will help identify which current community safety issues are considered to be most pressing from the public perspective. The focus of this approach will be to gather information about the types of issues that are causing concern and the geographic location of these issues. There should be a large degree of overlap with the findings of the fear generator audit undertaken by the police, but this process may also expose some additional issues that do not appear to be community safety concerns from the police perspective, but in fact are having a detrimental impact on the public. A list of potential items and suggested wording and scoring for this survey is presented in Table 3. This is a non-traditional approach to undertaking community safety surveys and the findings do not deal with victimization and any potential under-reporting.

Table 3. Potential items for the community safety survey to identify fear generators, crime generators, and crime attractors

The following are some issues that you may have encountered in the local community. For each type of issue that you have a concern about, please give information about the most prominent location that you've noticed

Issue	General location of problem (be as specific as possible)	Significance				
		1 - Minor safety concern	2	3	4	5- Major safety concern
Vandalism						
Graffiti						
Abandoned cars						
Discarded needles						
Illegal dumping						
Boarded-up properties						
Condoms on the ground						
Public drunkenness						
Loitering youth						
Aggressive pan-handling						
Sex-trade workers						
Public drug-use						
Homeless people						
Other concern (specify)						
Busy areas of the city that cause you to feel unsafe						
Areas of the city that you feel are high in criminal activity						

The data for this survey component of the triangulation methodology could be collected in two ways, which could operate in parallel. The first would involve a sample of the general community, who would be ongoing contributors to the

monitoring of community safety issues in the policing jurisdiction. The opportunity to participate in this process could be presented to individual community members through routine contact (e.g., attached to correspondence about annual local taxation notices, etc.), and individuals could then self-nominate to become part of a broad pool of potential survey respondents who could be drawn on over time. There will be age and gender differences in perceptions of the scope of safety concerns, so the sampling from this pool of participants would need to acknowledge this. This approach would mirror the strategies adopted by major polling organizations and would enable within-participant, longitudinal analysis of issues to be conducted. In addition to this, the second approach to surveying community members could involve targeting a sample of community ‘experts’ (ranging from shopkeepers and small business owners through to long-term displaced, homeless people who have resided in the area for a long period of time). These ‘experts’ would possess a wealth of knowledge about contemporary community safety issues and contacting them would represent a non-probability sampling approach, designed to garner information from those members of the community who would be aware of factors that are influencing community safety. The focus of this second surveying approach would be on generating representative sub-groups who possess knowledge about the highest safety concern locations.

Once the survey samples have been identified, there are two separate approaches that could be followed for collecting this data. With respect to surveying the participants from the pool of general community members, there are a number of easy-to-use online survey tools available that could achieve this objective, accompanied by a suite of online tutorials and information about how to develop and administer these surveys. In parallel, it would be possible to undertake an intensive, ‘clip-board’ survey approach, conducted on a single day, once a year, in specific areas of the policing jurisdiction, asking ‘experts’ a set of very targeted questions. For example, in a single day, researchers could visit all of the known fear generators, crime generators, and crime attractors within the community and talk to key people from the area, such as security personnel, shop-owners, homeless people, etc. This would provide the opportunity to over-sample from these knowledgeable groups with a view to generating additional information

about the area. This clip-board survey for locals could be structured to find out about how long they have been in the area, and also specific questions about the frequency at which community safety issues occur from their perspective, such as learning how long ago it was that they had last time witnessed someone being assaulted in the area.

These two survey approaches would complement each other, and would also add additional, relevant information to the triangulation methodology. The online survey would provide continuity of sample over time and the clip-board survey would enable local experts to provide additional insight. As with the data sets already discussed, it would be useful to compile the results of this surveying strategy to look at the frequency of the issues that were identified as concerns, the relative significance of each issue, and the geographic concentration of these community safety concerns.

Using the Community Safety Information to Guide Policing Strategies and Initiatives

A Problem-Oriented Policing Approach

With respect to utilizing the outcome of this community safety audit, problem-oriented policing (POP) provides a framework for developing strategies to counter crime and community safety issues which combines a diverse set of approaches into a focused course of action (Clarke & Eck, 2003). This concept was first proposed by Goldstein (1979) with the underlying premise that, “policing should fundamentally be about changing the conditions that give rise to recurring crime problems and should not simply be about responding to incidents as they occur or trying to forestall them through preventative patrols” (as summarized by Clarke & Eck, 2003, p. 20). In Goldstein’s (1979, p. 236) words, “If the police are to realize a greater return on the investment made in improving their operations ... they must concern themselves more directly with the end product of their efforts.” Goldstein advocated that to achieve this shift in focus, policing practices need to meet a number of objectives, including: (a) being more specific about the nature of individual problems, involving research, analysis, and interpretation of current and previous police responses, (b) assess the adequacy and effectiveness of these approaches within the context, (c) undertake a comprehensive exploration for

novel, alternative responses to existing problems, and (d) select the most suitable response(s) and implement them.

SARA

The SARA (Scanning, Analysis, Response, and Assessment) mnemonic, which was first proposed by Eck and Spelman (presented in 1987 at a Police Executive Research Forum in Washington, D.C., and referenced by Tilley, 2010, p. 186), builds on Goldstein's propositions and provides a formalized framework for capturing the crucial components of POP. (Alternatives that have also been proposed in recent years include Read and Tilley's (2000) PROCTOR (PROblem, Cause, Tactic/Treatment, Output, and Result), Ekblom's (2005) 5Is (Intelligence, Intervention, Implementation, Involvement, and Impact), and the Royal Canadian Mounted Police's (a.k.a., R.C.M.P. July 28, 2008) CAPRA (Clients, Acquire/Analyze Information, Partnerships, Response, and Assessment of Action Taken).) These alternatives have been mentioned to indicate an awareness of their existence, however, as SARA remains the most commonly promoted approach to implementing POP, this is the framework that is discussed throughout the remainder of this paper.) Clarke and Eck (2003, p. 20) discuss the principles that underlie each of the components of SARA, which are summarized as follows:

Scanning

The Center for Problem-Oriented Policing (www.popcenter.org) provides a summary of the objectives of the scanning process of SARA that include: (a) identify recurring crime/safety problems, (b) determine the frequency and duration of the problem, (c) identify the consequences of these crime/safety problems, (d) develop broad goals for addressing crime/safety problems, (e) prioritize problems for significance in terms of impact and with respect to the broad goals, and (f) selecting problems for closer examination. It is the intention that, in addition to providing an annual summary of community safety issues within a policing jurisdiction, the triangulation process outlined above would meet the objectives of the scanning component of SARA.

Analysis

The analysis phase of SARA involves undertaking a comprehensive review of a specific problem with a view to identifying the contextual factors that contribute to its cause. The greater the specificity with respect to analysis and problem definition, the more likely it is that a useful, effective response strategy will be able to be developed.

Table 4. The Haddon matrix (time interval × epidemiological triad), with example components for a community safety problem posed by public drunkenness in a local park and its impact on legitimate users of the facility

Epidemiological triad – contextual factors of the unwanted event			
Time interval	Human	Vehicle & Equipment	Environment*
Pre-drunkenness	<ul style="list-style-type: none"> • Legitimate users of the park (e.g., families) • Illegal activity in park (drinking in public, other drug use, etc.) • Age/sex/ethnicity of both legitimate and illegitimate persons 	<ul style="list-style-type: none"> • Lighting, shelter, potential for concealment, etc. • Proximity to alcohol vendors 	<ul style="list-style-type: none"> • Ease of access for legitimate users • Ease of access for illegitimate users • Purposes of park (e.g., sports, recreation, dog-walking) • Socio-economic situation of area
During drunkenness	<ul style="list-style-type: none"> • Interaction between legitimate users of the park and drunken individuals 	<ul style="list-style-type: none"> • Proximity of chosen drinking location to other locations (e.g., paths, sports venues, children’s play areas) 	<ul style="list-style-type: none"> • Proximity to liquor outlets • Proximity to public transport • Proximity to welfare agencies/finance institutions/pawn shops • Socio-economic situation of area • Proximity to housing • Proximity from supervision (private security or police)
Post-drunkenness	<ul style="list-style-type: none"> • Interaction between legitimate users of the park and drunken individuals • Interaction with law enforcement or private security • Interaction with neighbors in proximate housing 	<ul style="list-style-type: none"> • Vandalism of public space 	<ul style="list-style-type: none"> • Time to respond for police or private security • Proximity to public transport • Socio-economic situation of area

* Physical and socio-economic

The Haddon Matrix (Haddon, 1980, 1999), which was originally developed within a population health paradigm and designed as a mechanism for deconstructing the context within which injuries occur, has two axes: the first partitions time into pre-event, event, and post-event categories, and the second identifies, “elements of the epidemiological triad” (Lett, Kobusingye, & Sethi, 2002, p. 199). Table 4 outlines the potential for utilizing this matrix to develop a comprehensive understanding of the relationship between time and the various contextual factors involved with community safety problems. In this specific example, the community safety issue of public drunkenness in a local park is used to demonstrate how the Haddon Matrix can contribute to understanding the context of the problem with a view to differentiating between this and other community safety issues (including public drunkenness in other areas). Overall, the Haddon Matrix model provides a broad mechanism for defining the opportunity structure that could help determine resource allocation and operational, crime prevention goals.

Response

The response component of SARA requires two main activities: (a) generate creative, prevention-focused strategies for intervening at a preliminary stage in the causal chain with a view to reducing the likelihood of problems emerging (thinking beyond the traditional focus of the criminal law where relevant), and (b) building functioning partnerships with non-policing stakeholders that maximize the likelihood of collaborative, multifaceted prevention efforts being successful.

Crime prevention practitioners have developed a suite of techniques, termed collectively as situational crime prevention, which are built on five main components: increasing risk, increasing effort, reducing reward, removing excuses, and reducing provocations. These are summarized in Table 5 (Clarke & Eck, 2003). The logic that underpins this suite of techniques makes three fundamental assumptions about criminal behavior: (a) when crime occurs it is the result of an appropriate interaction between situation and motivation, (b) crime arises as a result of a choice, and (c) opportunity mediates the occurrence of crime (2008, pp. 178-180). Effectively, crime is assumed to be a “purposive behavior

designed to meet the offender’s commonplace needs” (Clarke, 1997, p. 10) within the immediately relevant temporal, physical, and logistical constraints.

Table 5. The 25 situational crime prevention techniques (Clarke & Eck, 2003)

Technique focus	Technique			
Increase Risk	1. Extend guardianship	3. Reduce anonymity	5. Strengthen formal surveillance	
	2. Assist natural surveillance	4. Use place managers		
Increase Effort	6. Target harden	8. Screen exits	10. Control tools/weapons	
	7. Control access to facilities	9. Deflect offenders		
Reduce Reward	11. Conceal targets	13. Identify property	15. Deny benefits	
	12. Remove targets	14. Disrupt markets		
Remove Excuses	16. Set rules	18. Alert conscience	20. Control drugs and alcohol	
	17. Post instructions	19. Assist compliance		
Reduce Provocations	21. Reduce frustrations and stress	23. Reduce arousal and temptation	25. Discourage imitation	
	22. Avoid disputes	24. Neutralize peer pressure		

It is important to note here that within these approaches to dealing with the issues that are negatively influencing community safety, there is scope for designing experimental style interventions that would meet the requirements necessary to attribute causality to any observed change (i.e., control groups). This would be an area that would benefit from discussion with academic, professional researchers. This will assist greatly with the assessment process (discussed next) as it will enable causality to be attributed to change, in a way that pseudo-experimental designs will not.

Assessment

In order to truly utilize a POP approach, it is essential to complete the SARA steps by evaluating the outcome of the POP strategy, with a view to using this additional outcome information as a driver for the next iteration of the prevention

process. This is essential to enable the policing agencies identify whether their results have been effective over time. Typically, efforts have been made to utilize the POP framework when concentrated applications of traditional crime prevention approaches have failed to produce the desired level of reduction. Consequently, it is important to maintain realistic expectations about what will be achieved through each individual implementation of POP, because "...POP describes the application of scientific methods and science rarely comes up with quick fixes. Most initial efforts fail!" (Tilley, 2010, p. 192). Just as Pronovost et al. (2006) identified with respect to measuring and improving safety within intensive care facilities, when implementing this approach within policing agencies it is essential that officers are engaged in the process, being given an opportunity to participate in selecting and developing community safety measures. In addition to this, officers will need to be given feedback regarding the organization's performance over time.

Discussion and Conclusions

To implement this strategy to measuring community safety within a policing jurisdiction the following stages need to be followed. First, working collaboratively within the police department, a set of metrics need to be decided upon that would capture aspects of community safety from existing police data that is collected as a by-product of day-to-day policing activity. Some examples of the types of measures that could be included in this have been outlined above. Second, based on the findings of academic research into fear generators and perceived risks of victimization, an audit of the presence (frequency and location) of these types of elements within the community needs to be undertaken. Third, the police department should gather a sample of community perspectives on specific issues that are causing them safety concerns. The strategies for generating the samples for these survey responses, and some examples of the types of questions that could be asked (and the way to ask them) have been discussed, above. Once this information has been collected, the findings should be triangulated to provide a comprehensive overview of the community safety issues that currently exist within the policing jurisdiction. The next component of this process is to use this information to develop specific strategies designed to target the community safety issues that have been identified as of greatest significance.

The SARA strategy, outlined above, provides one method of approaching this objective, building on the framework provided by the Haddon Matrix and implementing components of the situational crime prevention toolkit.

This process should be adopted in an iterative manner, working within a twelve month timeframe, to ensure that police departments are continually monitoring community safety and developing a body of knowledge about the safety issues that exist within their jurisdiction. Although the implementation of this framework for measuring community safety could be undertaken in partnership with professional research agencies, the intent of this paper has been to develop an approach that could be followed in-house by police agencies. Through the triangulation of these divergent data sources, which in their own rights all provide separate, valid insight into community safety, police departments will have a quantifiable window into community safety. Moving beyond this, by implementing the findings of this triangulation approach to guide focused prevention initiatives within the jurisdiction, this approach will also help inform policing strategy and enable the effectiveness of policing initiatives to be calculated to an operational standard.

In conclusion, it is important to reference some points that are explored more fully by Whitzman and Mayes (2005): despite the consensus that community safety issues are most effectively addressed on a local level, to date there has not been a strongly coordinated approach to developing appropriate indicators, targeting intervention initiatives based on indicators, or building on best-practice. As is apparent from the diverse approaches to defining community safety, there remains little consensus as to what the most appropriate measures for this concept are. However, the approach proposed here does provide a number of data sources that can be collected in parallel and triangulated. Furthermore, these indicators are goal directed, available at a fine-grain level, and can be updated annually, as advised by Whitzman and Mayes.

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