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who seek to institutionalize evidence-based practices and crime analysis within their own departments.

Crime analysis and stratified policing

A substantial body of empirical evidence suggests the most effective crime reduction strategies implemented by police are those that are proactive and

than 6 months and is represented on the survey by three analytical products:

1. analysis determining high crime/call locations;
2. analysis determining repeat offenders; and
3. crime maps (e.g. hotspot identification).

Finally, evaluation-oriented crime analysis focuses on citywide problems and evaluation and is represented on the survey by three analytical products:

1. analysis of citywide problems (e.g. false alarms);
2. evaluation of police operational response to a crime problem; and
3. evaluation of a crime prevention response.

Each analytical product was listed in a matrix and the patrol commander was instructed to check a box to identify which rank(s) in the agency routinely used each of the nine products. The ranks were represented in general terms as (1) patrol officers, (2) first-line supervisors, (3) management to account for differences among police agencies' organizational structures.⁵ Unchecked boxes were coded as '0' and checked boxes were coded as '1.'

Because stratified policing prescribes crime reduction activities are implemented differently by rank within the patrol division, certain ranks utilize specific crime analysis products with more frequency than others. Thus, the ranks selected by the patrol commander were weighted in the final variable based on the ideal stratification of crime reduction responsibility within stratified policing. For example, under a pure stratified policing model, while officers, first-line supervisors, and

score for each agency. The integration index ranged from 0 (i.e. none of these ranks uses any of the nine products) to 42 (i.e. all three ranks are using all nine

Results

Table 1 displays the measures of central tendency and dispersion for all of the variables included in our database and analysis. Assessment of the dependent variable, integration, indicates that, on average, agencies fall in the middle of the range. While there are agencies with high values,¹¹ 50% of the agencies reported integration below 23% and over 24% reported integration of less than 10. Thus, the majority of agencies have a mid to low level of integration. In addition, on average, patrol commanders valued evidence-based practices and prioritized accountability mechanisms slightly higher than the middle of the possible range (17.93 and 13.08, respectively).¹²

would, at a minimum, be expected to have analytical capabilities and most likely some integration of the analysis products within operations in order to

are often subject to bias, a fact that may be even more salient when considering the nature of the questions asked specific to this study. To the patrol commander who answers survey questions about whether his/her agency utilizes evidence-based strategies and whether crime analysis figure prominently within the agency's operations, there may be temptation to answer in the affirmative, lest their agency be thought of as not doing its job or being progressive. This need to appear progressive to outside inspection while internally maintaining the status quo may be attributable to loose coupling, which is a concept derived from institutional theoretical explanations of behaviours of public sector agencies. Simply put, institutional theory posits that public service agencies, such as the police, lack the means to demonstrate their effectiveness through easily measurable goals, such as crime prevention. Therefore, in order to maintain public and private support and funding necessary for continued survival, the organization will claim to adopt structures and practices that it is expected to have, regardless of whether the structures or practices actually exist in day to day operations. Thus, it can be said that the organization espouses certain ideals to stakeholders while the realities of every day practice are 'loosely coupled' to those ideals (Crank, 2003; Crank and Langworthy, 1992).

In some ways, our findings above are similar to those of Weisburd and colleagues (2003) who reported Compstat adoption enabled police agencies to espouse their progressive and innovative nature, when in reality Compstat adopters were largely functioning in an identical manner to non-adopters. Their findings, as well as ours, may be attributable to loose coupling, and the nature of our survey elucidates this relationship. In other words, what the agency 'says' they are doing is quite different from what they 'are' doing in actual practice. While the integration variable, which is intended to measure actual use of crime analysis products within the patrol division, provides some insight into operational reality, the argument can be made that it does not get to the heart of the issue.

Direct measures are always better than proxy measures, and future researchers should seek to directly measure and/or observe an agency's use of accountability mechanisms and the deployment of evidence-based strategies in the field.

The third focus of the study was the relationship between the priority of accountability mechanisms within the agency and the integration of crime analysis products within the patrol division. These significant results suggest that as self-reported measures of accountability increase, so does analysis integration within patrol. This finding is interesting for two reasons. First, this is a self-report measure like the evidence-based policing strategies and commitment measures, yet, unlike those measures, it emerged as a statistically significant predictor of integration. Thus, one might conclude the patrol commanders who realize the importance of accountability mechanisms are ensuring the use of crime analysis products to solve problems, since they oversee patrol operations. Second, this variable reflects the accountability measures for all ranks being positively linked to analysis integration weighted by use by the 'appropriate' rank. Thus, the result speaks to the effectiveness of approaches, such as stratified policing, that place a high importance on accountability and use crime analysis for all ranks appropriately, which is in contrast to the 0nshi6u70.9action

responsibility is critical. According to Santos

to a current staff member as a secondary responsibility are not putting value on crime analysis or the products created (Santos, 2016). Moreover, a primary crime analyst is in a good position to make recommendations to command staff about innovative data, techniques, and evidence-based strategies. For instance, in a recent study, Piza and Feng

- Perry, W. L., McInnis, B., Price, C. C., Smith, S. C., and Hollywood, J. S. (2013) *Predictive Policing: The Role of Crime Forecasting in Law Enforcement Operations*. Santa Monica, CA; RAND.
- Piza, E. L. and Feng, S. Q. (2017). 'The Current and Potential Role of Crime Analysts in Evaluations of Police Interventions: Results from a Survey of the International Association of Crime Analysts'. *Police Quarterly* 1–28, doi:10.1177/1098611117697056.
- Police Executive Research Forum [PERF]. (2013). *Compstat: Its Origins, Evolution, and Future in Law Enforcement Agencies*. Washington, DC: Author.
- Ratcliffe, J. H. (2016). *Intelligence-Led Policing*. London: Routledge.
- Santos, R. B. (2014). 'The Effectiveness of Crime Analysis for Crime Reduction: Cure or Diagnosis?'. *Journal of Contemporary Criminal Justice* 30: 147–168.
- Santos, R. B. (2016). *Crime Analysis with Crime Mapping*, 4th edn. Thousand Oaks, CA: Sage.
- Santos, R. G. and Santos, R. B. (2015). 'Evidence-based Policing," "What Works" and Stratified Policing," How to Make it Work'. *Translational Criminology* 8: 20–22.
- Santos, R. B. and Taylor, B. (2014). 'The Integration of Crime Analysis into Police Patrol Work: Results from a