1

Evidence-based policing

Research, practice, and bridging the Great Divide

Eric L. Piza

Brandon C. Welsh

Abstract

Evidence-based policing (EBP) revolves around the core belief that people are entitled to their own opinions, but not their own facts. The movement offers a process for identifying programs with the most promise for enhancing public safety and for communicating scientific knowledge to practitioner communities. This requires high levels of reciprocity between research and practice, as both sides play a key role in EBP. Unfortunately, the use of scientific evidence in policing remains far from standard practice. However, there have been a number of recent efforts to more tightly integrate research and practice in policing. While it would be inaccurate to describe these efforts as commonplace, they have garnered support from both researchers and practitioners and can help inform attempts to further advance EBP. This introductory chapter provides an overview of the evidence-based movement in policing, discusses the inherent divide between research and practice, and recounts contemporary approaches for supporting and institutionalizing EBP. We conclude with a brief discussion of the chapters comprising *The Globalization of Evidence-Based Policing: Innovations in Bridging the Research–Practice Divide*. The chapters cover four broad themes of EBP innovation: transferring scientific knowledge to the practice community; empowering officers to conduct police-led science; aligning the work of researchers and practitioners; and incorporating EBP in daily police functions.

Citation

Evidence-based policing: An overview

The origins and diffusion of an idea

Lawrence Sherman advanced evidence-based policing (EBP) as a new paradigm in his seminal *Ideas in American Policing* Police Foundation essay in 1998. EBP is based on the straightforward, but powerful, idea that police practices should be based on what works best in promoting public safety, as determined by the best available scientific evidence (Sherman, 1998). At its core, EBP offers a process for identifying programs and practices with the most promise for enhancing public safety, which can often include a range of different tactics and strategies (Lum & Koper, 2017).

Key terms are critical in understanding and characterizing EBP. "Evidence" pertains to knowledge generated from the scientific process rather than "criminal" evidence used in court proceedings (Welsh & Farrington, 2011). Being "evidence-based" means lessons are drawn from the overall body of knowledge rather than any single study or cherry-picked sample of studies (Mitchell, 2019). "Best available" evidence results from high-quality evaluation studies that possess a high degree of internal, construct, and statistical conclusion validity (Welsh, 2019). Evaluation studies incorporating comparable control conditions (i.e., experimental or quasi-experimental designs) do the best job of protecting against threats to validity (particularly internal validity) and are thus necessary for measuring program effect (Cook & Campbell, 1979; Farrington, Gottfredson, Sherman, & Welsh, 2006).

EBP is part of a larger and increasingly expanding evidence-based movement, which has roots in evidence-based medicine (Welsh, 2019). The medical field's influence on policing extends as far back as the early 1900s, when then Chief of the Berkeley (California) Police Department, August Vollmer, partnered with the local university to use scientific methods to inform agency operations (Sherman, 1998). Over the ensuing century, the medical field increasingly embraced an evidence-based model, with a large body of experiments (totaling over a million by the mid-1990s), generating a rich pool of scientific evidence that could inform practice. Policing, on the contrary, failed to develop similar evaluation systems needed to increasingly generate research-based guidelines for practitioners (Sherman, 1998). The medical field has advanced to the point that medical treatment must be rigorously tested before approved; EBP scholars advocate for police practices to be held to similar standards (Mitchell, Telep, & Lum, 2017).

In more modern times, the medical field's process for generating and disseminating research evidence greatly influenced EBP, as well as the social sciences more generally. The Cochrane Collaboration, named after esteemed British epidemiologist Sir Archie Cochrane, was established in 1993 to prepare, maintain, and disseminate systematic reviews of research on the effects of health care and medical interventions (Welsh, 2019). Systematic reviews incorporate rigorous methods for locating, appraising, and synthesizing evidence from existing evaluation studies, using a similar level of reporting detail as high-quality reports of original

research (Welsh, van der Laan, & Hollis, 2013). This methodology provides necessary transparency for consumers to clearly understand the search and analytical processes and confidently assess the conclusions (Neyroud, 2019).

Following the lead of the Cochrane Collaboration, the Campbell Collaboration (named after influential experimental psychologist Donald Campbell) was established in 2000 with the goal of disseminating scientific evidence on interventions in the social sciences. The Campbell Collaboration sponsors systematic reviews of the literature on a wide range of public policy areas, including crime and justice. To date, 20 Campbell systematic reviews have focused on police interventions (see Welsh, 2019, p. 448). This number does not include systematic reviews conducted after publication of Welsh (2019), such as Lum and colleague's (2020) review of body-worn camera research, or reviews of situational crime prevention practices that highly involve the police, such as CCTV (Piza, Welsh, Farrington, & Thomas, 2019; Welsh & Farrington, 2009). Additional reviews sponsored by the National Academies of Sciences have compared standard policing practices to recent strategic innovations (Weisburd & Eck, 2004) and explored the scientific evidence on various strategies of proactive policing (Weisburd & Majmundar, 2018).

Lum, Koper, and Telep (2011) further expanded the knowledge base by developing the EBP Matrix. The Matrix maps evaluation study results according to three dimensions of the intervention: (1) what is being targeted (individuals, groups, micro places, neighborhood, or jurisdictions); (2) whether they are reactive, proactive,

or highly proactive; and (3) whether they are general or more focused and tailored in nature. The Matrix illustrates that police are more effective when they are proactive, not reactive; focus on places, not just people; tailor their actions to specific problems; and are not over-reliant on arrest-based strategies (Lum & Koper, 2017).

Much is known today on the effect of various police practices on crime and justice outcomes. Program effect has been demonstrated across a range of jurisdictions and local contexts, both within the United States and in many other countries (Welsh, 2019). This indicates sufficient capacity to further develop and widely institutionalize EBP.

Expanding the scope of evidence-based policing

Over recent decades, EBP has received a fair amount of criticism from some scholars. Such critiques do not dispute the value of integrating science and practice, but rather focus on how scientific evidence is generated and assessed (Moore, 2006). It is useful to revisit the origins of EBP to contextualize such critiques. As previously discussed, evidence-based medicine is often cited as the impetus for EBP. Systematic reviews that synthesize findings of experimental and quasi-experimental evaluation studies, as popularized by the Cochrane Collaboration, have been greatly integrated into EBP. However, scholars have noted that evidence-based medicine prioritizes more than just evaluation outcomes, and that for policing to become similarly evidence-based as medicine requires "a deeper understanding of the dynamics preceding treatment, the

treatments selected, the dosage and longevity of such treatments, and the follow-up of such impacts" (Greene, 2018: 15–16).

Greene (2018) cautions against an *ends over means inversion* in EBP, whereby researchers focus exclusively on crime outcomes to the detriment of understating the role and functions of police. Weisburd, Farrington, and Gill (2017) described a literature primarily focused on outcomes as *first-generation* research that communicates what works but provides little guidance on how to effectively implement evidence-based strategies. Guiding practice has always been a main pillar of EBP, with Sherman (1998: 7) articulating "Putting research into practice requires just as much attention to implementation as it does to controlled evaluations." Moving towards *second-generation* research that provides more practical guidance will require increased use of complementary methodologies alongside experimental and quasi-experimental evaluations, such as qualitative observations, cost–benefit analysis, and descriptive approaches (Weisburd et al., 2017).

EBP scholars have increasingly prioritized identifying the most appropriate research design to answer the question at hand (Ariel, 2019), which parallels recent shifts in evidence-based medicine away from methodological "hierarchies" and towards an understanding of "appropriateness" (Crawford, 2017). While arguments for expanded methodologies are sometimes framed as contrary to the main intent of EBP, Sherman (1998) advocated for a mixed methods approach in his original essay, specifically regarding the work of "evidence-cops" tasked with using evidence to

shape practice. Such police personnel incorporate detailed observational information on the crime problem and modify evidence-based practice to fit local contexts (Welsh, 2019). Sherman (2013: 418) has more recently pushed back against a research agenda focused solely on quantitative methods, arguing "partial understandings of evidence-based practice converge on a single 'straw man' caricature: that quantitative thinking beats – and should replace – qualitative judgment. Nothing could be further from the truth."

Embracing a multi-methods approach can better enable a developmental understanding of EBP. Sparrow (2011) provided an illustrative example of such benefits in discussing the Boston Gun Project's work in developing Operation CeaseFire, the inaugural focused deterrence intervention. Harvard University researchers collaborated with a range of public safety stakeholders to trace guns used in homicides back to their origin of sale, identify networks of gang members by combing through police databases, and conduct focus groups with police officers and community members to diagnose the inter-gang "beefs" responsible for a majority of Boston's youth homicides. The working group devised a strategy customized to Boston after understanding these nuances of local gun violence. Such problem analysis using both qualitative and quantitative methods provided the foundation for all focused deterrence interventions that followed. This highlights a paradox of focused deterrence: that is, while it currently enjoys large support from the evaluation

evidence (Braga, Weisburd, & Turchan, 2018), it would not have developed without the use of some methods that rank lower on methodological scales.

Such an expanded EBP methodology allows for the exploration of a greater number of outcomes pertinent to the police mission, as most evaluation studies and subsequent systematic reviews exclusively focus on crime prevention (Tompson et al., 2021). Moore and Braga (2003) outlined seven dimensions of "bottom line" expectations citizens have for the police: reducing serious crime; holding offenders to account; maintaining safety and order; reassuring the public; providing quality services; using force and authority fairly and effectively; and using financial resources fairly, efficiently, and effectively. The list of citizen expectations of police has expanded in the time since to include factors such as fostering procedural justice, using alterative tactics with vulnerable populations, such as the people with mental illnesses, and mitigating threats of terrorism. A broad perspective of EBP focusing on a diverse range of data and analytical approaches is needed to inform the complex tasks police are expected to perform (Cordner, 2020).

Research translation

EBP researchers use data to build and test hypotheses for the explicit purpose of informing policy and practice (Mitchell, 2019). In this vein, two distinct efforts are required for EBP to realize its full potential. First, researchers must generate scientific evidence on specific police practices. Second, practitioners must consult the scientific

evidence to inform the design and implementation of public safety interventions. When considered in such a procedural manner, the importance of reciprocity between researchers and practitioners comes into focus (Huey & Mitchell, 2019). Such reciprocity is perhaps most important during the research translation process of EBP.

Research translation involves communicating scientific knowledge directly to practitioner audiences for the purpose of institutionalizing evidence-based practice (Laub, 2012). Such efforts have been bolstered by the development of a translational criminology, the systematic study of the translation, use, implementation, and institutionalization of research findings into practice (Lum & Koper, 2017, p. 266). Here, policing can again be linked to the medical field, which has recently drawn upon scientific evidence on knowledge transfer to disseminate innovations across the field (Greenhalgh & Papoutsi, 2019). Lum and Koper (2017) identify five knowledge research translation mechanisms that emerge across various disciplines: dissemination, interaction, social influence, facilitation, and incentives and reinforcement.

Dissemination focuses on efforts to communicate knowledge to practitioners, largely through "secondary" dissemination products that are more accessible than the "primary" products used to report original research findings (e.g., scholarly journal articles) (Rossi, Lipsey, & Freeman, 2004). Perhaps the largest effort at dissemination is carried out by the UK College of Policing, which was established in 2012 and charged by the national government with recommending police practices on the basis

of continuous review of research evidence. The College communicates research evidence through the What Works Centre for Crime Reduction, using the Crime Reduction Toolkit as its primary research translation tool.[1] The toolkit provides information on five elements (effect, mechanisms, moderators, implementation, and economics) for a wide range of crime prevention practices, with strength of findings communalized through an easy-to-interpret table. The previously discussed EBP Matrix uses an interactive web-based tool to communicate research evidence from all police crime control evaluation research of moderate-to-high methodological strength.[2] This visualization tool allows users to identify clusters of studies reporting favorable (or unfavorable) results, as well as access plain-language summaries of a study by clicking its respective dot in the Matrix. Key to both the Crime Reduction Toolkit and EBP Matrix is the translation of scientific knowledge into visually intuitive, easy-to-understand formats for practitioners and the general public.

Interaction involves researchers and practitioners jointly engaging in evidence generation. The action research model, which involves researchers and practitioners jointly contributing to problem identification, strategy development, and strategy implementation (Mock, 2010), is key to this process. Action research is distinguished from other types of researcher–practitioner partnerships by the continuous, fluid exchange of knowledge between both parties (Secret, Abell, & Berlin, 2011). Interaction can also be achieved via venues such as workshops, symposia, and conferences that cater to both research and practice audiences (Lum & Koper, 2017).

The University of Queensland's EBP workshops (Mazerolle et al., Chapter 9 in this volume) and the National Institute of Justice's Law Enforcement Advancing Data and Science (LEADS) program (Cordner, 2019) are examples of such.

Social influence is an important component of research translation, as practitioners often receive information from their peers. Influential police leaders can serve as champions of the EBP movement, helping to spread adoption into other police agencies. EBP champions can also come from other levels of an agency, including crime analysts, city planners, and frontline officers and supervisors (Lum & Koper, 2017). Sherman (2015) argued that such champions can function as powerful EBP advocates who link the need for evidence to urgent external demands and exemplify how current practice can evolve to meet higher standards.

It is also important to consider research translation in the context of individual agencies. Police officers and leaders supportive of EBP face resistance when the idea is not institutionalized within their agency (Sherman, 2015). Navigating such agency-level resistance is critical in introducing EBP into day-to-day police processes (Santos & Santos, 2019). The "facilitation" and "incentive and reinforcement" mechanisms of research translation become critical in this context. Facilitation takes dissemination and interaction a step further by creating tangible products to explain how aspects of EBP can be carried out in practice (Lum & Koper, 2017). For example, as part of the EBP Matrix Demonstration Project, Mitchell and colleagues (2017) developed a practical guide for police agencies to conduct in-house experimental evaluations.

Official incentive structures may further motivate police personnel to adopt EBP.
Lum and Koper (2017) argue that knowledge of EBP, and a demonstrated ability to
apply evidence-based practices, should be part of the criteria for promotion or transfer
to a more prestigious assignment. For academic researchers, incentives can come
from federal grants that fund research–practice partnerships (Lum & Koper, 2017) or
from academia embracing recent calls to formally recognize public-facing scholarship
in tenure and promotion decisions (Rogers, 2020).

Research & practice: Policing's Great Divide

Despite many positive developments over recent decades, EBP remains a foreign
concept to millions of police officers and leaders around the world (Sherman, 2015).
Of the occupations included in a national survey in Sweden, police employees
reported the lowest use of science in their profession (Brante, 2015, as cited in
Magnusson, 2020). Lum, Telep, Koper, and Grieco (2012) observed that only 24
percent of officers in their study reported ever hearing the term EBP despite a
Sergeant explaining what EBP was during roll-call trainings. While higher-ranking
officers exhibit more knowledge of EBP than lower-ranking officers, they tend to
define it in a way that is different from the intended meaning (Telep & Bottema,
2020). Furthermore, officers familiar with EBP often hold a number of
misconceptions (Huey et al., 2019) or object to having scientific evidence usurp
professional judgment (May, Hunter, & Hough, 2017).

Within policymaking arenas, the scientific evidence base actively competes with other real-world considerations, such as government priorities, public concerns, and political agendas. As such, it would be naïve to expect scientific evidence will ever be the sole influence on public policy (Welsh et al., 2013). Prevailing paradigms and ideologies as well as short-term political considerations and bureaucratic goals oftentimes shape policy decisions of elected officials (Welsh & Farrington, 2011) and, consequently, the police leaders they choose to hire (Bueermann, 2020). Given such barriers, crime prevention policy has too often been designed according to "best-guessing, emotional hunches, or anecdotal reflections on single cases" (Lum, 2009, p. 2). Political enthusiasm for specific crime prevention programs, and the subsequent commitment of resources towards such efforts, can make these programs "too big to fail," whereby they continue receiving public resources well after negative research results develop (Papachristos, 2011).

Scholars have noted several causes of this inherent divide between research and practice. A primary source pertains to the competing interests and incentive structures of academia and policing. For academic researchers, whether a particular project succeeds or fails is less important than the development of knowledge. For practitioners, such information can be deemed as their own personal shortcoming (Braga & Schnell, 2013; Knutsson, 2012). Furthermore, the realities faced by public safety practitioners often makes strict adherence to the scientific process unrealistic. Researcher–practitioner partnerships seem to provide a worthwhile vehicle for better

integrating research and practice. While the literature provides multiple examples of such partnerships in policing (Braga & Davis, 2014; Mitchell et al., 2017; Piza, Kennedy, & Caplan, 2018), there are inherent challenges in aligning the work of police and academics. Bradley and Nixon (2009) describe a "dialogue of the deaf," whereby police and their academic partners suffer from a mutual misunderstanding that negatively impacts their research efforts. Certain cultural aspects can also complicate the relationship. Common aspects of police training and socialization, emphasizing the dangers of the profession, can lead police officers to view outsiders suspiciously (Sierra-Arévalo, 2019), with such suspicion sometimes extending to outside academic researchers (Crawford, 2017; Piza et al., 2018). Police also tend to hold a healthy level of skepticism towards media attention, which can sometimes conflict with the public dissemination of research findings (Fleming, 2010). Such issues surrounding researcher–practitioner partnerships can be exacerbated with frequent leadership turnover (Braga, Turchan, & Winship, 2019; Santos & Santos, 2019) or when budget deficits and other resource constraints surface (Piza & Chillar, 2020; Piza & O'Hara, 2014; Terrill, Rossler, & Paoline, 2014), which negatively affects the sustainability of EBP.

While aspects of police culture have often been highlighted as inhibitors to researcher–practitioner partnerships, academic culture is hardly blameless. Huey and Mitchell (2018) argue the institutional environments that train academics and shape a shared ideology can cause partnerships to fail. Seven common behaviors of academics

can irrevocably damage researcher–practitioner partnerships: (1) lecturing instead of listening; (2) publicly challenging ideas without considering interpersonal dynamics; (3) using specialist language; (4) considering the use of plain language as "dumbing down"; (5) seeing police as solely "subjects" or "data sources"; (6) being critical of others but not self-reflective; and (7) picking sides in academic disputes (which can undermine the credibility of researchers in general). Academia's traditional process of knowledge dissemination further runs counter to the values of research translation important for EBP. The slow pace of the academic research process is often not conducive to the operational needs of police (Sparrow, 2011). The typical process of academic publishing, involving lengthy peer-reviewing, means that research findings will not be available until well after (several months or even years) the research has been completed (Wheeler, 2018). The demands of academic publishing further results in authors placing a premium on methodology and statistical analysis and writing in a language largely inaccessible to most practitioners (Buerger, 2010). While such emphasis on methodology and analysis typically produces high-quality science, it may not always translate into research that is policy relevant (Clear, 2010; Wellford, 2009).

At this time, we should note that there are numerous academic journals specifically dedicated to policy-relevant research.[3] However, criminal justice agencies typically do not have subscription access to academic journals, which can hamper an agency's efforts to become more evidence-based (Bennell & Blaskovits, 2019). Both

the practitioner and researcher communities have attempted to support the type of open science needed to facilitate EBP. The American Society of Evidence-Based Policing and International Association of Crime Analysts each publish research briefs providing short, plain-language summaries of journal articles for practitioners. Some scholars have provided open access to their work by reproducing their journal articles as freely available post prints or research summaries.[4] However, open science efforts are primarily conducted on an ad hoc basis and represent a small fraction of the research that can inform policy and practice. Ashby (2020) found that only 22 percent of the 12,541 articles published in criminology journals between 2017 and 2019 were available to non-subscribers. This was despite authors having the legal right to make articles open access by self-archiving post-prints on publicly accessible repositories or personal/institutional websites (which does not involve any monetary fees) in at least 95 percent of cases.[5] Such a heavily paywalled literature reflects Weisburd and Neyroud's (2011: 9) argument that the inaccessibility of academic journals "has meant that much useful research might just as well have been buried in a time capsule."

Bridging the Great Divide

Navigating smothering paradigms

Sherman (2015) describes EBP as being inhibited by a "smothering paradigm" that values personal experience over scientific evidence, which engenders sustained

support for the standard model of policing. Smothering paradigms are not unique to policing, as every field has their own unique examples. As demonstrated by Sherman (2015), the manner by which smothering paradigms were navigated in other fields, particularly medicine, provides lessons for EBP. Powerful advocates are needed for policing to reach a "tipping point," whereby EBP replaces the standard model (Sherman, 2015). Others have discussed this role in the context of evidence champions (e.g., May et al., 2017). Whatever the term, recent advancements suggest the field has become well equipped to support personnel in their EBP advocacy efforts.

Police leaders are perhaps the most obvious candidates to serve as powerful advocates. A survey of authors cited in the EBP Matrix found that lack of support from police leadership (followed immediately by lack of support from mid-level police supervisors) was the factor most damaging to policing research (Piza, Szkola, & Blount-Hill, 2020). This finding demonstrates how leadership well versed in EBP can play a key role in promoting evidence-based practice. A number of potential avenues for translating EBP principles to leadership have surfaced over recent years, including executive sessions on effective police practice (see Douglas and Braga, Chapter 12 in this volume) and graduate education programs specifically catered to police command staff, such as the programs offered by Cambridge University[6] and John Jay College of Criminal Justice.[7] Efforts to recognize innovative EBP leaders have also surfaced, such as the Evidence-Based Policing Hall of Fame and the

Distinguished Achievement Award from George Mason University's Center for Evidence-Based Crime Policy (Lum & Koper, 2017, p. 276).

Additional EBP champions could be created by moving further towards a model of police-led science, in which police take the lead role in generating and disseminating scientific evidence (Sherman, 2011). Police-led science acknowledges that academics working alone cannot supply the volume of research needed to fill current knowledge gaps (Tompson, Belur, Morris, & Tuffin, 2017). Policing scholars have recently advocated for the incorporation of three entities to increase police-led science: embedded criminologists, police pracademics, and crime analysts. Each of these entities has an important, distinct role to play in police-led science (Piza et al., 2020). Maximum benefits can be achieved by aligning their work flows within an action research framework (Piza & Feng, 2017).

Embedded criminologists are outside academic researchers who take an active role in the day-to-day routine of police agencies, typically spending at least a portion of their time on-site at the agency (Braga, 2013). The presence of an in-house academic offers police agencies uninhibited access to rigorously trained, scientifically objective scholars in support of agency operations, which can greatly enhance the agency's problem analysis and program evaluation capacity (Braga & Davis, 2014). However, there are challenges related to securing the necessary leave time from the criminologist's home institution and the lack of skilled academic researchers willing

to meet the day-to-day demands of police agencies (Braga, 2016). Therefore, police agencies should empower their internal personnel in support of police-led science.

Police pracademics, who are active police officers who have received academic training, have emerged as a popular model for police-led science (Huey & Mitchell, 2016). The incorporation of pracademics has been facilitated by recent increases in police education levels. The increase in officer education represents a departure from standard procedure, as policing has traditionally relied on police academies to provide initial and ongoing training for officers (Cordner, 2020). While increased education has yet to translate into standard use of science in policing (Sherman, 2013), providing officers with academic training may better position police to drive the EBP research agenda. Examples from the literature show that RCTs led by police pracademics enjoy a high level of quality and adherence to best practices of experimental research (Magnusson, 2020; Mitchell et al., 2017).

Crime analysis units can also be leveraged in support of police-led science (Piza & Feng, 2017). The work products of crime analysts are central to many evidence-based practices, such as problem-oriented policing and hot spots policing (Santos, 2014). Crime analysts are used to communicating technical information to organizational leaders, operational point persons, and policymakers in an actionable manner, which can be key to research translation (Lum & Koper, 2017; Piza, Szkola, & Blount-Hill, 2020). Crime analysts could be further integrated in EBP by switching

their focus from short-term considerations towards more long-term considerations that may better support evidence-based practice (Telep & Bottema, 2020).

Police-led science can also be facilitated by reconsidering and reconfiguring researcher–practitioner partnerships. Rojek, Martin, and Alpert (2015) offered three typologies of research partnerships: (1) cooperation, which is short-term and informal in nature (e.g., the agency seeks advice from a researcher or provides the research partner with data for analysis); (2) coordination, which is more formal, focusing on a specific project or goal and ending when the project concludes (e.g., the agency contracts a researcher for a specific analysis or works jointly with the researcher to secure grant funding for a specific evaluation); and (3) collaboration, which involves formalized long-term partnerships where police agencies and researchers work together on multiple projects over time. Rojek and colleagues (2015) found extensive interaction among stakeholders, strong levels of trust, and personal relationships as key benefits of the collaboration model. An important, but often overlooked, first step in building strong research–practice partnerships is nurturing relationships between police and their research partners. Like any other relationship, researcher–practitioner partnerships require trust (Crawford, 2017), which primarily emerges through rapport and empathy (Huey & Mitchell, 2018). Such rapport and empathy can be created and sustained by adjusting the traditional structure of researcher–practitioner partnerships, whereby the coordination of stakeholder efforts towards shared objectives makes research mutually beneficial for all involved parties (Tompson et al., 2017).

Evolution rather than revolution

Sherman (2015) further illustrated that adding an "evolutionary" dimension to existing paradigms better supports innovation than considering reforms purely in terms of a "revolution" against existing paradigms. By describing innovation as an evolution, reformers can prevent fear of the unknown that commonly results when current practice is threatened to be overthrown (i.e., a revolution). EBP at its core is about serving and protecting the public as effectively as possible, and can best be considered as a supplement to current police practice rather than a replacement (Cordner, 2020). It is certainly possible to frame EBP using "evolutionary" language to audiences new to the concept.

Sherman's (2013) Triple-T strategy of targeting, testing, and tracking provides a potential model for better integrating EBP principles into all aspects of the police mission. Targeting involves focusing crime prevention resources towards the units most in need, and requires systematic ranking and comparison of levels of harms associated with various places, times, people, and situations. Testing is currently the main activity of EBP and refers to generating scientific evidence about "what works" to ensure that interventions neither increase crime nor waste taxpayer money. Tracking involves measuring the on-the-ground outputs and activities of police to ensure officers are doing what police leaders decide should be done to address

particular harms. Such integration of crime analysis and problem solving into all levels of a police agency is key to institutionalizing EBP (Santos & Santos, 2019).

Towards the global institutionalization of evidence-based policing

It is not hyperbole to state that today we know more about effective police practice than we have at any prior point in history. Moving police further towards EBP would generate several benefits inclusive of more effective, efficient, and cost-beneficial control of crime and disorder. These include a decreased likelihood of inflicting unintended harm on the community, a reduction in taxpayer concern about policing strategies being wasteful, safer and healthier police officers, and the creation of policing philosophies more immune to complaints of politics, as rigorously evaluated practices are neither conservative nor progressive (they are simply effective or ineffective) (Bueermann, 2020).

An honest assessment of the current state of affairs highlights myriad challenges inherent in EBP. However, we feel that solely focusing on these challenges can result in an overly pessimistic picture. Sherman (2013) noted that police interest in using evidence grew most rapidly in the approximate ten-year period preceding 2012. Interest has continued to increase in the time since, as evidenced by the formation of EBP professional societies around the world (Huey & Mitchell, 2019; Sherman, 2015), practitioner-focused EBP training, such as the National Institute of

Justice's LEADS program (Cordner, 2019), multiple public registries of crime prevention programs (Fagan & Buchanan, 2016), and research translation tools, such as the EBP Matrix (Lum et al., 2011; Lum & Koper, 2017) and Global Policing Database (Mazerolle, Eggins, Higginson, & Stanko, 2017). Following such developments, a number of recent efforts have helped to further bridge the divide between research and practice.

This book presents case studies of recent innovations in EBP. We explore EBP innovations across four themes: transferring scientific knowledge to the practice community; empowering officers to conduct police-led science; aligning the work of researchers and practitioners; and incorporating evidence-based policing in daily police functions.

Transferring scientific knowledge to the practice community

Part I includes four chapters that discuss a number of recent efforts to better translate research evidence to practitioners. In Chapter 2, Peter Neyroud presents case studies on police-led diversion models, the global implementation of community policing, and the use of EBP to support police reform in India. The international examples presented by Neyroud show how EBP principles can be applied across different local contexts. In Chapter 3, Jerry Ratcliffe discusses the development and delivery of an EBP training program for mid-level command staff and analysts at police departments, who have traditionally been excluded from EBP training efforts.

Exposing mid-level personnel to best practices in EBP can help to further integrate research and practice. In Chapter 4, Nancy La Vigne provides an in-depth accounting of criminology's influence of policing policy and practice. Through interviews with research, policy, and practice influencers, the chapter provides a historical accounting of the challenges and successes in translating research to practice, with an emphasis on how to improve this process moving forward. In Chapter 5, Aiden Sidebottom and Nick Tilley discuss the work of the What Works Centre for Crime Reduction and the EMMIE framework (which measures Effect, Mechanisms, Moderators, Implementation, and Economics of crime prevention programs) for synthesizing research evidence. The chapter demonstrates the need for primary studies and systematic reviews to draw upon a wider range of studies using diverse methodologies to further integrate research and practice.

Empowering officers to conduct police-led science

Part II brings together four chapters that focus on efforts to empower police to take a lead role in EBP. In Chapter 6, Richard Smith recounts his experience as a senior police manager who developed research capabilities via receiving masters- and doctoral-level education and participating in the international Fulbright Scholar program. Smith explains how these experiences informed his work overseeing police reform as Superintendent of the London Metropolitan Police Service. Two chapters in this part discuss the work of newly created Societies of EBP. In Chapter 7, Heather

Prince, Jason Potts, and Renée Mitchell recount the formation of the American Society of Evidence-Based Policing (ASEBP) and the organizational activities that lead to ASEBP members leading applied field experiments throughout the US. In Chapter 8, Laura Huey and Lorna Ferguson discuss how the Canadian Society of Evidence-Based Policing (Can-SEBP) resulted from a distinct need of Canadian government to better foster evidence-based approaches to public safety, and how Can-SEBP came to empower officers to directly engage with EBP. In Chapter 9, Lorraine Mazerolle, Sarah Bennett, Peter Martin, Michael Newman, David Cowan, and Simon Williams describe EBP workshops developed and offered by the University of Queensland (Australia) and the field trials that developed from the workshops. These trials, which tested police training, road policing, drug law enforcement, and youth crime interventions, positively impacted organizational reforms in a number of jurisdictions across Australia and New Zealand.

Aligning the work of researchers and practitioners

Part III includes five chapters that explore various methods for making researcher–practitioner partnerships more productive. In Chapter 10, Natalie Todak, Kyle McLean, Justin Nix, and Cory Haberman draw upon their experiences in the inaugural cohort of the LEADS Academics program. They discuss the benefits LEADS Academics offer EBP, as well as the applied research projects resulting from their participation, including collaborations with the Charleston (South Carolina) Police

Department, the Dayton (Ohio) Police Department, the New York City Police Department, and the Redlands (California) Police Department. In Chapter 11, Manne Gerell provides an overview of his work as an embedded criminologist with the intelligence unit of the National Police of Sweden, which culminated in a field test of police helicopters in hot spot policing against burning cars. This represents an important expansion of the embedded criminologist model into the field of crime analysis. In Chapter 12, Stephen Douglas and Anthony Braga explore three models of non-traditional research partnerships: executive sessions, embedded criminologists, and police pracademics. Drawing upon their personal experiences, Douglas and Braga explain how each type of partnership can benefit EBP by overcoming obstacles inherent in traditional research partnerships. In Chapter 13, Alejandro Gimenez-Santana, Joel Caplan, and Leslie Kennedy present their work with the Newark Public Safety Collaborative (NPSC). The NPSC uses a model of data-informed community engagement to assist a working group of 28 community partner organizations in diagnosing crime problems and developing evidence-based solutions. In Chapter 14, Eric Piza, Sarah Chu, and Brandon Welsh present a proposal for police technology research to be guided by Community Technology Oversight Boards (CTOBs) comprised of practitioners, researchers, and community stakeholders. After illustrating the potential benefits of CTOBs through Piza's experience in analyzing closed-circuit television cameras in Newark, New Jersey, the chapter explores how

the model can guide research on emerging surveillance technologies, such as facial recognition technology, Ring doorbell cameras, and aerial drones.

Incorporating evidence-based policing in daily police functions

Part IV includes five chapters on a range of approaches to embedding EBP principles into daily police practice. In Chapter 15, Cynthia Lum and Christopher Koper illustrate how the EBP Matrix Demonstration Project (MDP) helps facilitate activities essential to maximizing EBP: translation, receptivity, and institutionalization. MDP efforts discussed in this chapter involve the creation of tools to support the application of EBP in the field and the communication of EBP principles to police management and leadership. In Chapter 16, S. Rebecca Neusteter and Chris Magnus cover the CompStat360 platform that harnesses the benefits of both the traditional CompStat model and community policing perspectives. The chapter recounts how CompStat360 was piloted and developed through a practitioner–researcher partnership in Tucson, Arizona. In Chapter 17, Bruce O'Brien and Mark Evans recount the creation of the New Zealand Police Service's Evidence-Based Policing Centre (EBPC). O'Brien and Evans illustrate the work of the EBPC across five key functions that help institutionalize EBP within the police service: data science; performance, research, and insights; delivery and improvements; implementation and evaluation; and tasking and coordination. In Chapter 18, Michael Green and Leigh Bates provide an accounting of various violence prevention efforts of the New York State Division of

Criminal Justice Services (DCJS). The work of DCJS demonstrates how EBP can be institutionalized on a statewide level, by coordinating efforts of various jurisdictions and using a network of crime analysis centers to bolster the analytical capacity of police agencies throughout New York State. In Chapter 19, Lawrence Sherman recounts how the Cambridge Police Executive Programme facilitated the global spread of EBP. With faculty and alumni making important scientific discoveries and working to institutionalize EBP around the world, the Programme is proof of a concept that can be replicated in other top-tier universities. It further shows how academic training can directly, and quickly, impact police agency operations.

In the book's concluding chapter (Chapter 20), Brandon Welsh and Eric Piza, drawing on the 18 commissioned chapters, identify lessons learned and next steps for the global movement of EBP. It is our hope that readers in all parts of the world can look to the chapters and their lessons as road maps to help foster EBP. And we hope that for those already committed to using science to guide practice, the knowledge and lessons can be used to ensure that EBP is firmly institutionalized within their agency.

References

Ariel, B. (2019). "Not all evidence is created equal": On the importance of matching research questions with research methods in evidence based policing. In R. J. Mitchell & L. Huey (Eds.), *Evidence based policing. An introduction.* (pp. 63–86). Bristol, United Kingdom: Policy Press.

Ashby, M. P. J. (2020). The open-access availability of criminological research to

 practitioners and policy makers. *Journal of Criminal Justice Education*.

 https://doi.org/10.1080/10511253.2020.1838588

Bennell, C., & Blaskovits, B. (2019). The case for open police research. In R. J.

 Mitchell & L. Huey (Eds.), *Evidence based policing. An introduction.* (pp.

 117–129). Bristol, United Kingdom: Policy Press.

Bradley, D., & Nixon, C. (2009). Ending the "dialogue of the deaf": Evidence and

 policing policies and practices. An Australian case study. *Police Practice and*

 Research, *10*(5–6), 423–435.

Braga, A. A. (2013). Embedded Criminologists in Police Departments. *Ideas in*

 American Policing. Washington, DC: Police Foundation.

Braga, A. A. (2016). The value of 'pracademics' in enhancing crime analysis in police

 departments. *Policing: A Journal of Policy and Practice, 10*(3), 308–314.

Braga, A. A., & Davis, E. F. (2014). Implementing science in police agencies: The

 embedded research model. *Policing, A Journal of Policy and Practice*, *8*(4),

 294–306.

Braga, A. A., & Schnell, C. (2013). Evaluating place-based policing strategies:

 Lessons learned from the smart policing initiative in Boston. *Police Quarterly*,

 16(3), 339–357.

Braga, A. A., Turchan, B., & Winship, C. (2019). Partnership, accountability, and

 innovation: Clarifying Boston's experience with focused deterrence. In D.

Weisburd & A. A. Braga (Eds.), *Police Innovation: Contrasting Perspectives* (Second edition, pp. 227–250). Cambridge, United Kingdom: Cambridge University Press.

Braga, A. A., Weisburd, D., & Turchan, B. (2018). Focused Deterrence Strategies and Crime Control: An Updated Systematic Review and Meta-Analysis of the Empirical Evidence. *Criminology and Public Policy*, *17*(1), 205–250.

Brante, T. (2015). Professionerna i kunskapssamhället: en jämförande studie av svenska professioner. (1. uppl.) Stockholm: Liber.

Bueermann, J. (2020). Adopt evidence-based policing: Response essay. In C. M. Katz & E. R. Maguire (Eds.), *Transforming the police: Thirteen key reforms* (pp. 26–29). Long Grove, IL: Waveland Press.

Buerger, M. E. (2010). Policing and research: two cultures separated by an almost-common language. *Police Practice & Research*, *11*(2), 135–143.

Clear, T. R. (2010). Policy and evidence: The challenge to the American Society of Criminology. *Criminology*, *48*(1), 1–25.

Cook, T. D., & Campbell, D. T. (1979). *Quasi-experimentation: Design and analysis issues for field settings*. Boston, MA: Houghton Mifflin.

Cordner, G. (2019). A practical approach to evidence based policing. In R. J. Mitchell & L. Huey (Eds.), *Evidence based policing. An introduction.* (pp. 231–242). Bristol, United Kingdom: Policy Press.

Cordner, G. (2020). *Evidence-based policing in 45 small bytes*. Washington, D.C.:

National Institute of Justice.

Crawford, A. (2017). Research co-production and knowledge mobilisation in policing. In J. Knutsson & L. Tompson (Eds.), *Advances in evidence-based policing* (pp. 195–213). New York: Routledge.

Fagan, A. A., & Buchanan, M. (2016). What works in crime prevention? Comparison and critical review of three criem prevention registries. *Criminology & Public Policy*, *15*(3), 617–649.

Farrington, D. P., Gottfredson, D. C., Sherman, L. W., & Welsh, B. C. (2006). The Maryland scientific methods scale. In *Evidence-based crime prevention.* (Revised Ed, pp. 13–21). New York, NY: Routledge.

Fleming, J. (2010). Learning to work together: Police and academics. *Policing: A Journal of Policy and Practice*, *4*(2), 139–145.

Greene, J. R. (2018). Rethinking police evaluation research: Balancing "zen" with the "art of motorcycle maintenance." *Justice Evaluation Journal*, *1*(1), 32–58.

Greenhalgh, T., & Papoutsi, C. (2019). Spreading and scaling up innovation and improvement. *BMJ (Online)*, *365*(May), 1–8.

Huey, L., & Mitchell, R. (2018). Seven deadly sins: The role of academic culture in killing potential police-academic partnerships. *Police Science*, *3*(1), 33–36.

Huey, L., & Mitchell, R. J. (2016). Unearthing hidden keys: Why pracademics are an invaluable (if underutilized) resource in policing research. *Policing: A Journal of Policy and Practice*, *10*(3), 300–307.

Huey, L., & Mitchell, R. J. (2019). An introduction. In R. J. Mitchell & L. Huey

    (Eds.), *Evidence based policing. An introduction.* (pp. 3–14). Bristol, United

    Kingdom: Policy Press.

Huey, L., Blaskovits, B., Bennell, C., Kalyal, H., & Walker, T. (2019). Identifying

    some misconcpetions about evidnce based policing: A research note. In R. J.

    Mitchell & L. Huey (Eds.), *Evidence based policing. An introduction.* (pp. 51–

    60). Bristol, United Kingdom: Policy Press.

Knutsson, J. (2012). Vulnerbility of evaluators of problem-oriented policing projects.

    In N. Tilley & G. Farrell (Eds.), *The reasoning criminologist. Essays in*

    honour of Ronald V. Clarke. (pp. 108–118). Oxford, United Kingdom:

    Routledge.

Laub, J. H. (2012). Translational criminology. *Translational Criminology*, *3*, 4–5.

Lum, C., Koper, C. S., & Telep, C. W. (2011). The evidence-based policing matrix.

    Journal of Experimental Criminology, *7*(1), 3–26.

Lum, C., Koper, C. S., Wilson, D. B., Stoltz, M., Goodier, M., Eggins, E., Higginson,

    A., & Mazerolle, L. (2020). Body-worn cameras' effects on police officers and

    citizen behavior: A systematic review. *Campbell Systematic Reviews*, *16*(3),

    1–40.

Lum, C. M. (2009). Translating police research into practice. *Ideas in American*

    Policing. Washington, DC: Police Foundation.

Lum, C. M., & Koper, C. S. (2017). *Evidence-based policing. Translating research*

into practice. Oxford, United Kingdom: Oxford University Press.

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

Magnusson, M.-M. (2020). Bridging the gaps by including the police officer perspective? A study of the design and implementation of an RCT in police practice and the impact of pracademic knowledge. *Policing: A Journal of Policy and Practice*, *14*(2), 438–455.

May, T., Hunter, G., & Hough, M. (2017). The long and winding road: Embedding evidence-based policing principles. In J. Knutsson & L. Tompson (Eds.), *Advances in evidence-based policing* (pp. 139–156). New York, NY: Routledge.

Mazerolle, L., Eggins, E., Higginson, A., & Stanko, B. (2017). Evidence-based policing as a disruptive innovation. The global policing database as a disruption tool. In J. Knutsson & L. Tompson (Eds.), *Advances in evidence-based policing* (pp. 117–138). New York, NY: Routledge.

Mitchell, R. J. (2019). A light introduction to evidence based policing. In R. J. Mitchell & L. Huey (Eds.), *Evidence based policing. An introduction.* (pp. 15–28). Bristol, United Kingdom: Policy Press.

Mitchell, R. J., Telep, C. W., & Lum, C. (2017). *The ten-step guide for conducting in-house experimental evaluations. A guide for law enforcement practitioners.* Fairfax, Virginia: The Center for Evidence-Based Crime Policy, George

Mason University.

Mock, L. (2010). Action research for crime control and prevention. In J. Klofas, N. K. Hipple, & E. McGarrel (Eds.), *The new criminal justice. American communities and the changing world of crime control*. New York and London: Routledge.

Moore, M. H. (2006). Improving police through expertise, experience, and experiments. In D. L. Weisburd & A. A. Braga (Eds.), *Police innovation: Contrasting perspectives* (First, pp. 322–338). New York, NY: Cambridge University Press.

Moore, M. H., & Braga, A. A. (2003). *The "bottom line" of policing. What citizens should value (and measure!) in police performance.* Washington, D.C.: Police Executive Research Forum.

Neyroud, P. (2019). Systematic reviews: "better evidence for a better world." In R. J. Mitchell & L. Huey (Eds.), *Evidence based policing. An introduction.* (pp. 103–116). Bristol, United Kingdom: Policy Press.

Papachristos, A. V. (2011). Too big to fail. The science and politics of violence prevention. *Criminology & Public Policy*, *10*(3), 1053–1061.

Piza, E. L., & Chillar, V. F. (2020). The effect of police layoffs on crime: Results from a natural experiment involving New Jersey's two largest cities. *Justice Evaluation Journal*. https://doi.org/10.21428/cb6ab371.1500f255

Piza, E. L., & 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*, *20*(4), 339–366.

Piza, E. L., Kennedy, L. W., & Caplan, J. M. (2018). Facilitators and impediments to designing, implementing, and evaluating risk-based policing strategies using risk terrain modeling: Insights from a multi-city evaluation in the United States. *European Journal on Criminal Policy and Research*, *24*(4), 489–513.

Piza, E. L., & O'Hara, B. A. (2014). Saturation foot-patrol in a high-violence area: A quasi-experimental evaluation. *Justice Quarterly*, *31*(4), 693–718.

Piza, E. L., Szkola, J., & Blount-Hill, K.-L. (2020). How can embedded criminologists, police pracademics, and crime analysts help increase police-led program evaluations? A survey of authors cited in the evidence-based policing matrix. *Policing: A Journal Of Policy and Practice*. https://doi.org/10.1093/police/paaa019

Piza, E. L., Welsh, B. C., Farrington, D. P., & Thomas, A. L. (2019). CCTV surveillance for crime prevention: A 40–year systematic review with meta-analysis. *Criminology and Public Policy*, *18*(1), 135–159.

Rogers, K. (2020). *Putting the humanities PhD to work*. Durham, N.C.: Duke University Press.

Rojek, J., Martin, P., & Alpert, G. (2015). *Developing and maintaining police-researcher partnerships to facilitate rsearch use: A comparative analysis*. New York, NY: Springer-Verlag.

Rossi, P. H., Lipsey, M. W., & Freeman, H. E. (2004). *Evaluation: A systematic approach*. Thousand Oaks, CA: Sage.

Santos, R. B. (2014). The effectiveness of crime analysis for crime reduction: Cure or diagnosis? *Journal of Contemporary Criminal Justice*, *30*(2), 147–168.

Santos, R. G., & Santos, R. B. (2019). A four-phase process for translating research into police practice. *Police Practice and Research*, *20*(6), 585–602.

Secret, M., Abell, M. L., & Berlin, T. (2011). The promise and challenge of practice-research collaborations: Guiding principles and strategies for initiating, designing, and implementing program evaluation research. *Social Work*, *56*(1), 9–20.

Sherman, L. W. (1998). *Evidence-based policing. Ideas in American Policing*. Washington, DC: Police Foundation.

Sherman, L. W. (2011). Police and crime control. In M. Tonry (Ed.), *The Oxford Handbook of Crime and Criminal Justice* (pp. 509–537). Oxford, United Kingdom: Oxford University Press.

Sherman, L. W. (2013). The rise of evidence-based policing: Targeting, testing, and tracking. *Crime and Justice*, *42*(1), 377–451.

Sherman, L. W. (2015). A tipping point for "totally evidenced policing": Ten ideas for building an evidence-based police agency. *International Criminal Justice Review*, *25*(1), 11–29.

Sierra-Arévalo, M. (2019). The commemoration of death, organizational memory, and

police culture. *Criminology*, *57*(4), 632–658.

Sparrow, M. K. (2011). Governing science. *New Perspectives in Policing. Harvard University Executive Session on Policing and Public Safety.* Cambridge, MA: Harvard Kennedy School of Government.

Telep, C. W., & Bottema, A. J. (2020). Adopt evidence-based policing. In C. M. Katz & E. R. Maguire (Eds.), *Transforming the police: Thirteen key reforms* (pp. 9– 25). Long Grove, IL: Waveland Press.

Terrill, W., Rossler, M., & Paoline, E. A. (2014). Police service delivery and responsiveness in a period of economic instability. *Police Practice and Research*, *15*(6), 490–504.

Tompson, L., Belur, J., Morris, J., & Tuffin, R. (2017). How to make police- researcher partnerships mutually effective. In J. Knutsson & L. Tompson (Eds.), *Advances in evidence-based policing* (pp. 175–194). New York, NY: Routledge.

Tompson, L., Belur, J., Thornton, A., Bowers, K. J., Shane, D., Sidebottom, A., Tilley, N. & Laycock, G. (2021). How strong is the evidence-base for crime reduction professionals? *Justice Evaluation Journal, 4(1),* 68-97.

Weisburd, D., & Eck, J. E. (2004). What can police do to reduce crime, disorder, and fear? *The Annals of the American Academy of Political and Social Science*, *593*(1), 42–65.

Weisburd, D., Farrington, D. P., & Gill, C. (2017). What works in crime prevention

and rehabilitation: An assessment of systematic reviews. *Criminology and Public Policy, 16*(2), 415–449.

Weisburd, D., & Majmundar, M. K. (2018). *Proactive policing: Effects on crime and communities. Proactive Policing: Effects on Crime and Communities.* Washington, D.C.: National Academies Press.

Weisburd, D., & Neyroud, P. (2011). Police science: toward a new paradigm. *New Perspectives in Policing. Harvard University Executive Session on Policing and Public Safety.* Cambridge, MA: Harvard Kennedy School of Government.

Wellford, C. (2009). Criminologists should stop whining about their impact on policy and practice. In N. Frost, J. Freilich, & T. R. Clear (Eds.), *Contemporary issues in criminal justice policy* (pp. 25–30). Belmont, California: Wadsworth Cengage.

Welsh, B. C. (2019). Evidence-based policing for crime prevention. In D. Weisburd & A. A. Braga (Eds.), *Police Innovation: Contrasting Perspectives* (Second edition, pp. 439–456). Cambridge, United Kingdom: Cambridge University Press.

Welsh, B. C., & Farrington, D. P. (2009). Public area CCTV and crime prevention: An updated systematic review and meta-analysis. *Justice Quarterly, 26*(4), 716–745.

Welsh, B. C., & Farrington, D. P. (2011). Evidence-based crime policy. In M. Tonry (Ed.), The Oxford Handbook of Crime and Criminal Justice (pp. 60–92). New

York: Oxford University Press.

Welsh, B. C., van der Laan, P. H., & Hollis, M. E. (2013). Systematic reviews and cost-benefit analysis: Toward evidence-based crime policy. In B. C. Welsh, A. A. Braga, & G. J. N. Bruinsma (Eds.), *Experimental criminology: Prospects for advancing science and public policy* (pp. 253–276). New York: Cambridge University Press.

Wheeler, A. P. (2018). *The length it takes from submission to publication.* Retrieved from https://andrewpwheeler.wordpress.com/2018/05/09/the-length-it-takes-from-submission-to-publication/

Notes

[1] See https://whatworks.college.police.uk/toolkit/Pages/Toolkit.aspx

[2] See https://cebcp.org/evidence-based-policing/the-matrix/

[3] *Criminology & Public Policy*, *Journal of Experimental Criminology*, *Justice Evaluation Journal*, and *Police Practice & Research*, to name a few.

[4] For example, see the personal websites of Matt Ashby (http://lesscrime.info/publication/), Justin Nix (https://jnix.netlify.app/publication/), Eric Piza (https://ericpiza.net/publications/), and Jerry Ratcliffe (https://www.jratcliffe.net/publications).

[5] For an overview of the different models of open access publishing, including no-cost

green open access, see https://www.criminologyopen.com/pub/letter/release/6

[6] https://www.crim.cam.ac.uk/Courses/mst-courses/MStPolice

[7] https://www.jjay.cuny.edu/nypdexecutive