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The Future of Evidence-Based Policing

Introduction

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In 1998, at an "Ideas in Policing" lecture at the Police Foundation in Washington, DC, Lawrence Sherman "threw down the gauntlet" to police and researchers to join a movement toward "evidence-based policing" (EBP; see Sherman, 1998). Sherman was not the first scholar to suggest the importance of research evidence in policing, but he was the first to argue that policing should become part of the more general evidence-based policy movement that was gaining strong traction in medicine, education, and other areas of policy science. Sherman did not simply call for more or better use of research evidence in police practice; he called for an approach to policing that would bind academia and policing in a way that had not been done before: the police would not simply use evidence; evidence would become the key element of decision-making about organizational policy and practice (Sherman, 1998).

Sherman's call for EBP was followed by a broad interest in evidence-based policy in crime and justice. In part due to his essay about policing, there has been a growing recognition of the importance of evidence-based policy in reaching decisions about criminal justice programs and practices more generally (e.g., Blomberg et al., 2016; Bueermann, 2012; Cole et al., 2016; Lum & Koper, 2017; Pew Charitable Trusts, 2014; Sherman, 2013; Sherman et al., 2002; Wilson & Petersilia, 2010). Indeed, it is reasonable to say that the idea of evidence-based decision-making has become key not only to theory but also to practice.

In this book, we take stock of how the field of EBP developed since Sherman's seminal lecture, and where it is heading. We try to address specific impediments to EBP in terms of implementation, the research evidence that forms the basis for EBP, and the tools of evaluation and

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assessment that are used to develop this evidence (e.g., Lum & Koper, 2017; Lum et al., 2012; Weisburd & Neyroud, 2011). But in addition to questions that are often raised by policing scholars, such as "what is the present state of the evidence in EBP?" and "how can we get police agencies to implement EBP?," we also ask more fundamental questions such as does EBP mean that science will *contribute* to decision-making or will it *determine* decision-making? What is the role of practitioners' experience in EBP? What is the practitioner's perspective on EBP, and how does it differ from the perspectives of scientists? Twenty years after Lawrence Sherman's seminal address to the Police Foundation, and with the numerous theoretical and empirical papers that have been published since (e.g., Greene, 2014; Neyroud & Weisburd, 2014; Sherman, 2015; Sparrow, 2011; Willis & Mastrofski, 2014), it is time to look back and to consider the future of EBP. That is the purpose of our volume.

1.1 WHAT IS EVIDENCE-BASED POLICING?

EBP requires that decision-making in policing be strongly influenced by basic and applied research. For example, large-scale policing programs in this context would not be widely implemented without strong scientific evidence of the programs' success. In turn, programs that are implemented would be evaluated and assessed on a regular basis to ensure that they are meeting the goals of the organization. But EBP goes deeper than this because it suggests that science will become an integral part of the police mission, and the police will become advocates in the development of science in policing (Weisburd & Neyroud, 2011). This means that science would be relevant not just for defining whether programs or practices are effective, but also for aiding the police in identifying how they should be managed organizationally, how police officers should be chosen and trained, and how police agencies can encourage positive health outcomes for the police, just to name a few areas of importance that must be informed by science.

Unfortunately, when scholars and practitioners talk about EBP, they generally fall back upon what science tells us about the effectiveness of police practices. This is certainly an important area of focus and one of the key contributions of EBP to policing. And indeed, there have been major strides in the production of evidence about what works, as reflected by a recent review of the National Academy of Sciences, Engineering, and Medicine of proactive policing (Weisburd & Majmundar, 2018), and chapters in our volume that review the evidence base of police practices

to reduce crime (see Chapters 5 and 6). There is also a growing body of evidence on outcomes relevant to policing beyond reducing crime, such as community satisfaction and police legitimacy (see Chapter 7). Nevertheless, we think it is a mistake to define EBP in narrow terms, relevant only to questions of "what works." EBP should cover every aspect of police organization and management. Decisions about management styles, for example, the number of police that are needed in a jurisdiction, the way they should be managed, the tools that they should be given, the tasks that they should focus upon, and more, should be informed by science. We believe that this is the essential idea of EBP: that evidence should become a key part of every aspect of police operations.

We are not arguing that EBP has not informed an array of questions and problems in policing. For example, there is a growing body of literature on how the police must change in management style, culture, and recruitment to be amenable to EBP (Lum & Koper, 2017; Sherman, 2013; Telep, 2016). A number of rigorous studies examine questions such as what are the most beneficial work schedules for police (Amendola et al., 2011) or how police investigations can be more effective (Roman et al., 2009; Wilson et al., 2010, 2011). But both advocates and critics of EBP have often focused on the question of "what works," and have left many other key questions that science should inform on the sidelines. The science of EBP in this context needs to expand much beyond its present focus. We return to this issue in more detail in our conclusions.

Similarly, debates over EBP often focus around the use of particular methods, such as experimental designs, to inform police practices. There is a widely held view among critics of EBP that its major contribution lies in the advocacy of rigorous experimental field trials, to the exclusion of other methods of gaining knowledge in science (Greene, 2014; Sparrow, 2011, 2016). We do not think there is doubt in science that well-implemented randomized trials provide the best method for isolating treatment or program impacts (see Boruch, 1975; Boruch et al., 2000; McCord, 2003; Weisburd, 2000, 2003; Weisburd & Hinkle, 2012). This is why in medicine, for example, new drug treatments must show results from experimental field trials before they can be approved for general use (Ruberg et al., 2019; Temple & Ellenberg, 2000).

But science includes an array of methods that are appropriate for answering different types of questions. Descriptive and observational research has great value in defining where problems lie, and in taking into account what is happening in the field (see Chapters 4 and 11). Qualitative methods can inform knowledge about the mechanisms of causal effects and help us to

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gain a more complete understanding of how problems develop and are understood (see Chapter 9). Survey research is key to informing our understanding of how citizens and the police view policing and its problems (see Chapters 7 and 10). There is not one method in science that is "right" for EBP. Indeed, EBP must have a large toolbox to deal with the broad array of questions in policing that it can inform, as is the case, for example, in evidence-based medicine (Audrey, 2011; Green & Britten, 1998) or evidence-based education (Kozleski, 2017; Odom et al., 2005). Making the debate over EBP about a particular method, for example, experimental field trials (Greene, 2014; Sparrow, 2011, 2016), is a distraction from the main contribution of EBP, which is to bring science to the broad array of policing challenges. In sum, we define EBP in broad terms, both in terms of the types of questions EBP seeks to answer and in terms of the research methods that are "right" for answering these questions.

1.2 EVIDENCE-BASED POLICING AND POLICE AGENCIES: TAKING "OWNERSHIP" OF SCIENCE

In our experience, a common criticism of EBP brought by practitioners is that it suggests the predominance of scientists over police practitioners (Lum & Koper, 2017; also see Chapters 4 and 10). In this vision of EBP, police agencies are "taken over" by scientists who make decisions with little reference to police craft, officers' professional experience, or other considerations such as the law, budget constraints, and local customs, norms, and priorities. This view of EBP is an anathema to police practitioners, and indeed to many police scholars who criticize the idea of EBP (Greene, 2014; Sparrow, 2011, 2016; Willis, 2013; Willis & Mastrofski, 2017, 2018; Willis & Toronjo, 2019). And their concerns are understandable. Scientists are in no position to run police agencies. The role of scientists is to develop a science of policing. Scientists are trained to produce knowledge, to develop theoretical paradigms, and to produce rigorous methods for gaining answers to questions. They are trained to theorize, investigate, and evaluate; they are not trained to run police agencies. The task of scientists is to produce knowledge and evidence about policing – to provide the science that can be used to make informed decisions in policing.

Does this mean that science is only advisory in EBP? In such a context, it is likely that the police will fall back to professional experience and intuition rather than utilize scientific knowledge. If science is only advisory, it will likely be relegated to a marginal place in policing. As Chapter 10 in our volume suggests, there is a natural predisposition to

rely on experience and intuition in making decisions, not only in policing but in other fields. A series of studies of the police point to the difficulty of getting police to rely on science in making decisions, even though they are aware of and support the idea of EBP (Blaskovits et al., 2020; Fleming & Rhodes, 2018; Hunter et al., 2015; Jonathan-Zamir et al., 2019; Palmer, 2011; Telep & Lum, 2014; Telep & Winegar, 2015).

Scientists should not be running police agencies. At the same time, making science only "advisory" in policing will not provide the kind of reform that is required for EBP to take root in police agencies. For EBP to be fully integrated into policing, there will have to be a sea change in the culture of policing. Police must take "ownership" of science in policing (see Chapter 3; Weisburd & Neyroud, 2011, 2013). This means that they must be knowledgeable about what the science of policing requires. They must look at keeping up with scientific evidence in policing as a daily part of their job. They must participate in conferences and meetings where scientific evidence is presented and discussed, and they must encourage research in their agencies. Police must value science and accept the value of its normative framework. For example, police must value scientific evidence whether it supports their innovations or not.

One of us (Weisburd) once went to New York City to convince the then Police Commissioner to evaluate the COMPSTAT program that was widely credited by the media and the police as the key contributor to New York City's large crime decline in the 1990s and early 2000s (see review by Rosenfeld et al., 2005). After explaining to the Commissioner that the data being used are not rigorous enough to draw strong causal conclusions about the program's impacts on crime, the Commissioner responded by politely declining to support the research, saying: "You can only bring me bad news." This of course was true. There was wide support in the media and political circles for the role of COMPSTAT in reducing crime in NYC. But how would we respond to a leader of a major medical center saying he or she did not want to evaluate a new drug treatment that had gotten good press for the medical center because a rigorous study could show that the drug didn't work or was harmful? Imagine if the intervention was for breast cancer or a serious disease affecting children. We would simply say that this is wrong and dangerous.

One of the important contributions of the evidence-based policy movement is its recognition that sometimes "cures can harm" (McCord, 2003). A classic example in criminology is the Cambridge Summerville Youth Study (Cabot, 1940). The study initiated in the late 1930s was one of the first randomized experiments in any field in the United States.

It sought to examine whether a series of social, educational, and psychological interventions would aid high-risk youth in avoiding crime and, more generally, live successful lives. These interventions included counseling, tutoring, medical care, and group activities such as camps. There was a clear consensus then that the program would help the children involved, as there would be today.

This is one of the fallacies common in program development by practitioners. There is a strong assumption that the program will "do good" and certainly cannot do harm. But in a follow-up 30 years later, Joan McCord discovered that the treatment condition youth were more likely to be arrested, to have alcohol or drug abuse problems, and die on average two years earlier (McCord 1978, 1981, 1992). A variety of explanations were offered for the "backfire" effects of the program, including labeling of the children and the collective activities being "schools for crime" (Braga, 2016a; Gottfredson, 2010). But more generally, Joan McCord pointed out the importance of recognizing that "cures can harm."

We have no doubt that this is relevant to policing, where "cures" may include law enforcement activities such as stops or arrests, use of force in responding to citizens, or labeling of specific individuals or places as needing police attention. We are not arguing that this should lead us away from policing as a tool for improving communities, as some have recently argued ("defund the police"; see Chapter 2). But we think that in policing in particular we cannot assume that interventions will have positive impacts on the community. The view of the Commissioner in NYC we noted earlier is particularly troubling in a context where policing activities can indeed "do harm."

For EBP to be implemented in the real world of policing, police executives and police officers more broadly must come to value science and take "ownership" of science. In our volume, this point is made strongly, not simply in reference to scholars (Chapter 3) but also to police practitioners (Chapters 14 and 15) and policymakers (Chapter 16). Scientists do not take control of police organizations in EBP; they develop the science that underlies EBP.

An important trend in EBP today is the emergence of what some have called "pracademics" (Braga, 2016b; Huey & Mitchell, 2016; Willis, 2016). Pracademics are police officers who have training in science. Academic programs in policing around the world are now training substantial numbers of police officers in scientific methods and approaches. This is happening across the United States, in criminology programs such as those at George Mason University or the University of Cincinnati, and

around the world, for example, at Cambridge University or the Hebrew University of Jerusalem. Cambridge University deserves special mention because of its ongoing master's program in Applied Criminology and Police Management (Police Executive Programme),[1] which has focused specifically on EBP, and has generated a large number of rigorous research studies, which are often published in the *Cambridge Journal of Evidence-Based Policing* published by Springer. Indeed, the journal is an outgrowth of the academic program. The police officers trained at Cambridge, who come from around the world, are becoming leaders for the advancement of EBP. The Hebrew University of Jerusalem also deserves specific mention because it has become the home for the Israel Police higher education program. Senior commanders in Israel are now gaining a BA led by the Institute of Criminology, and many of the most senior commanders are enrolled in an MA program in the Institute. Its results are yet to be seen, but the emphasis on EBP suggests that a generation of police executives who are being trained will be committed to the EBP idea.

This should not be underestimated, as a number of chapters in our volume emphasize the key role of police executives in successfully implementing EBP (Chapters 3, 11, 14, and 15), a point also made in Sherman's original proposal for EBP (see Sherman, 1998). Simon Perry and Michael Wolfowicz (Chapter 14) propose the idea of the "super evidence cop," arguing that a key indicator of success in implementing EBP programs is that the leader of a police agency have significant knowledge about police science and be committed to evidence-based practice.

1.3 THE IMPORTANCE OF ADVANCING THE SCIENCE OF EVIDENCE-BASED POLICING

In some sense, it would seem intuitive that EBP "should" be the dominant philosophy of policing. Speaking more generally about the importance of evidence-based policy, a report by the Pew Charitable Trusts describes the approach in a way that it seems self-evident:

Evidence-based policymaking uses the best available research and information on program results to guide decisions at all stages of the policy process and in each branch of government. It identifies what works, highlights gaps where evidence of program effectiveness is lacking, enables policymakers to use evidence in budget and policy decisions, and relies on systems to monitor implementation and measure key outcomes, using the information to continually improve program performance. (Pew Charitable Trust, 2014, p. 2)

[1] See: www.crim.cam.ac.uk/Courses/mst-courses/MStPolice

Why would governments not want to use the best available research and information to inform policies and practices? Shouldn't EBP be easy to integrate and implement for police agencies? In many papers that advocate evidence-based policy, there is much discussion of the benefits to the government and governmental agencies if they adopt the evidence-based approach (Boruch et al., 2010; Neyroud & Weisburd, 2014; Petrosino et al., 2001; Weisburd & Neyroud, 2013). This can give the impression that the adoption of EBP is a simple affair or that it has been adopted widely across police agencies over the last two decades. However, that is not the reality today. Despite the growing interest in research evidence in policing, there is still a good deal of disagreement as to what such an approach would require (e.g., Brown et al., 2018; Lumsden & Goode, 2018). And more generally, while evidence and science are in a much stronger position in policing than they were two decades ago, the call for EBP as a dominant paradigm for developing practices and programs in policing has not been realized (e.g., Sherman, 2015; Weisburd & Neyroud, 2011; see Chapter 3).

One reason for this is simply that in advancing EBP, scientists have often ignored the question of how police innovation can be institutionalized. This is part of a more general failure of scholars to be concerned not simply with developing police innovation, but with defining how such innovation can be broadly implemented in police agencies (see Chapter 5). Lum and Koper (2017) argue in regard to problem-oriented and community-oriented policing, for example:

Community policing and problem-oriented policing were likely viewed and developed as broader philosophies for policing, ones that should occupy the minds of every police officer and supervisor during his or her daily activities. Unfortunately, community and problem-oriented policing have not panned out in these ways because they were not institutionalized into the everyday systems of policing. (Lum & Koper, 2017, p. 151)

There is a large literature today on the barriers to the implementation of EBP. It details a wide range of issues, from the failures of implementation, as noted by Lum and Koper (2017), to the limitations of police training and education (Weisburd & Neyroud, 2011), to the natural proclivities of police to rely on professional experience (Jonathan-Zamir et al., 2019). In our volume, we touch on these issues in a number of chapters. But our main focus is not on what has to happen in police agencies to advance EBP, but rather on an issue that has received far less attention – the science that is necessary to produce for EBP to be successfully integrated into policing. We return to this theme in more detail

in our conclusions, where we explore what our volume has taught us regarding the future of EBP.

1.4 ORGANIZATION OF THIS VOLUME

This volume includes five main parts. We begin by taking stock of EBP. Building on geographic "Tiers" recently used in the struggle against the COVID-19 pandemic, in Chapter 2 Sherman presents a recent view of EBP, in which he calls for a Tiered policing system: the extent to which intrusive policing measures are applied would match the level of serious, violent crime in the area. In Chapter 3, Neyroud and Weisburd provide a revised and updated version of their 2011 paper in which they have called for a new paradigm that changes the relationship between science and policing. Specifically, they add a new emphasis on moral and ethical considerations in research and practice that must, in their view, become an integral part of EBP. In the last chapter of this part (Chapter 4), Willis and Toronjo call for more attention in EBP to the choices that patrol officers make in their everyday encounters with the public and argue for the value of their rich experiences in generating useful knowledge. They also draw attention to the importance of going beyond questions of "what works" in EBP to normative and moral questions that characterize street-level discretion.

In the second part of the book, we recap the evidence that forms the basis for EBP. In Chapter 5, Telep and Weisburd update an earlier review of systematic reviews in policing (2004–2015), which now encompasses systematic reviews on 30 policing topics. They argue that while much knowledge is available today about the effectiveness of different policing approaches, scholars have paid little attention to questions about how evidence-based practices should be chosen and implemented in the field. To provide another view of the state of the evidence in EBP, in Chapter 6, Weisburd, Braga, and Majmundar summarize the findings of the National Academy of Sciences, Engineering, and Medicine report on proactive policing (Weisburd & Majmundar, 2018), which provides the most comprehensive and recent review to date of what proactive policing is and what it does. The report finds sufficient scientific evidence to support the adoption of many proactive policing practices. Successful strategies are often characterized by focusing police resources and expanding the tools of policing, and generally lead to successful outcomes without producing negative community reactions. In the final chapter of this part (Chapter 7), Gill reflects on the findings of the National Academy of

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Sciences, Engineering, and Medicine report, and argues that contrary to what may appear as a disjuncture between crime control and community outcomes, community support and collaboration are essential to crime control and may moderate the success or failure of proactive, crime-control strategies.

Having reviewed the evidence base for EBP, the third part of the book discusses innovations in tools of evaluation and assessment. Drawing on the global policing database, in Chapter 8 Mazerolle, Eggins, Hine, and Higginson review the place of experiments in EBP. They identify that randomized controlled trials (RCTs) form only 12% of the evidence in policing but have had an enormous influence on policy. They also find that most of the evidence in policing concerns frontline policing practices, and that half of the RCTs in the world were carried out in the United States. In Chapter 9, Perry, Jonathan-Zamir, and Willis introduce the concept of "subjective causality" – a qualitative approach in which causality is determined through the subjective lens of the individual. Using qualitative interviews, they demonstrate the subjective, causal relationship that individuals make in their own minds between police-provided procedural justice and police legitimacy.

The fourth part of the book discusses different types of challenges to implementing EBP, many of which have not been given sufficient attention to date. In Chapter 10, Jonathan-Zamir and Weisburd draw attention to the "science-experience paradox" in policing: while police officers often support EBP, they tend to favor their experience and intuition when making decisions. Given the generality and psychological basis of the tendency to rely on experience, they argue that science should be "injected" into officers' experience, and that both science and experience should be treated as necessary components in successful policing. Taking advantage of a recent process evaluation of the EMUN reform in the Israel Police, in Chapter 11 Litmanovitz, Weisburd, and Hasisi identify three keys to the successful implementation of EBP in practice: the ability to analyze data and reflect on it, organizational flexibility, and local engagement with the reform. Lack of these three keys poses great challenge to the successful implementation of EBP.

Taking a comparative approach, in Chapter 12, Jaitman reviews and discusses some of the challenges to the implementation of EBP in Latin America and Caribbean. These include familiar challenges, such as the relationship between academia and practitioners, but also challenges that are more specific to the region, such as the instability of political