

Evidence-Based Policing

Translating Research into Practice

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From: Cynthia Lum and Christopher S. Koper (2017). *Evidence-Based Policing: Translating Research into Practice*. Oxford, UK: Oxford University Press.

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TRANSLATIONAL CRIMINOLOGY

Ideas for Researchers

Much of our book has been geared to law enforcement officers who are in various stages of implementing evidence-based policing. But researchers are equally important in this venture. Not only have they been central to the generation of the evidence base for policing, but they have also been instrumental in institutionalizing research into practice, developing crime analysis and research and planning units, providing opportunities for police personnel to learn about and do research, informally educating agencies about research findings, and finding creative ways to increase the receptivity of officers to research.

Thus, we close our volume by presenting ideas for researchers on how they might continue to advance evidence-based policing from their vantage point. Specifically, we focus on two themes that can be broadly subsumed under a concept called “translational criminology,” which we will define below. The first is that researchers can contribute to the study of the use of research and the effectiveness of strategies and interventions designed to increase research use in practice—i.e., the evidence for implementing evidence-based policing. The second perhaps presupposes the first—that researchers can develop strategies and interventions to increase research use in the first place.

What is Translational Criminology?

Criminologists, sociologists, and others studying criminal justice have long devoted their study to two fundamental and arguably inseparable

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questions: (i) Why do people commit crime (or, why does crime occur); and (ii) what should be done about it? However, as Francis Cullen (2011), a former president of the American Society of Criminology has pointed out, the second question has incurred much more disciplinary skepticism. For example, Travis Hirschi, a leading theorist in juvenile delinquency and the field, offered a decidedly negative opinion of this area of study, which he disdainfully labeled “administrative criminology” or “practical criminology.” He characterized it as atheoretical, lacking historical grounding or academic memory, and contributing to government repression of citizens (Hirschi 1993). Although Hirschi’s position is likely not dominant today, it would be fair to say that the status of practice-focused research, publications, and journals is not as high as that of scholarly work engaged in tests of theories of crime.

One might argue, however, that criminology would have been half-baked had it only focused on etiology; a natural extension of explaining why a phenomenon occurs—especially one that is viewed as a social negative—is determining what should be done about it. Indeed, the study of how these two areas of inquiry are connected and what that connection means to the practice of criminal justice has a long history in our discipline. When Shaw, McKay, and their colleagues first mapped out residences of juvenile delinquents in Chicago, they did so not only to explain what they believed was the cause of delinquency, but also to develop the Chicago Area Projects to do something about crime problems (Shaw and McKay 1942; see also Bernard, Snipes, and Gerould 2010; Sampson 2011). Those studying developmental criminology not only worked to understand why juveniles commit crime but also were motivated to develop more tailored approaches to combating delinquency and antisocial behavior at different stages of the life course (Loeber and Stouthamer-Loeber 1996; Sampson and Laub 1993). And, those studying crime concentrations and hot spots (see, e.g., Sherman and Weisburd 1995; Sherman, Gartin, and Buerger 1989a; Weisburd 2002) not only increased our knowledge of deterrence theory and place-based criminology, but also facilitated the development of a police deployment model to reduce crime. These are only three of many examples that abound in our field.

This tradition of linking theoretical and practice-oriented research in criminology and then using that research to inform policy is the foundation for translational criminology (see Laub 2011). Translational criminology is the theory and study of how the products of criminological and criminal justice research turn into outputs, tools, programs, interventions, and actions in criminal justice practice. While evidence-based policing and translational criminology are related, they are different. Recall, our vision of evidence-based policing includes not only the generation of research knowledge about policing (interventions, organization, behavior, etc.), but also the translation, use, implementation, and institutionalization of those findings into practice. Translational criminology is both the study of those latter processes and the creation of strategies for research use that in turn can be implemented and studied.

What follows is a discussion about these two themes of translational criminology with ideas for researchers on advancing evidence-based policing. Researchers have already done a great deal to advance evidence-based policing, especially in the area of evaluating policing interventions and understanding police behavior and organizations. However, we advocate for more research in an area where there is little research knowledge: the evidence for implementing and institutionalizing evidence-based policing as we have described it. Second, we conclude with activities that researchers might consider exploring, in a translational criminology mode, to advance evidence-based policing.

Building the Evidence for Evidence-Based Policing

Police researchers and their practitioner partners have done a great deal to build the knowledge base about police functions, organizations, activities, behaviors, and relationships and interactions with citizens. And advocates for evidence-based practices in policing have tried many ways to institutionalize research use and increase its receptivity that run the gamut of ideas in this book. But what is the evidence for the effectiveness of these activities? Do some translation efforts work better than others? If so, why? If research is not being used, why is this the case, and what can be done to increase the receptivity of research in practice?

Without a reliable knowledge base about *how* we can translate research into practice effectively and what leads to successful evidence-based practice, much of the effort to increase the use of research outputs in the evidence-based crime policy arena may be viewed as best guesses or best practices based on anecdotal experience. Perhaps more appropriately phrased, they may not be evidence based. Specifically, we need to develop and test theories about how research turns into policing outputs, and we need to test interventions that attempt to achieve translation or increase receptivity to research. We also need to understand what the protective and risk factors are that facilitate or hinder translating and implementing science in policing. Questions about how research impacts practice and how long it takes (and whether such processes might be sped up) continue to be unclear and underdeveloped.

➔ More specifically, translational research for evidence-based policing can include a wide variety of topic areas and specific questions. For example, what factors lead law enforcement agencies and their personnel to be receptive to—or demand—research knowledge? Building research evidence for receptivity requires research knowledge on how practitioners receive knowledge from research and what influences their receptivity and use of that information. It also requires understanding what types of institutional infrastructure and systems are needed for agencies and their officers to be receptive to research. For instance, perhaps adjusting rewards and incentives structures is much more

effective and cost-efficient in getting police to act in ways that are evidence based than is investing in expensive training modules developed by specialists. Or, perhaps both are needed in conjunction.

We also would need to know more about the best mechanisms by which to translate or disseminate research ideas into practice. For example, does our Matrix work to translate research to practice? How about [Crimesolutions.gov](https://www.crimesolutions.gov)¹ or the Global Policing Database?² Is training the way to go? What types of partnerships seem to work best to increase research receptivity? Finally, can we measure the “gap” between research and practice in an empirical way, and can we document this gap over time? What influences the size of the gap across agencies or knowledge areas? What reduces this gap over time?

Translational criminology questions might also focus on the supply or generation of research. For example, what motivates the development of certain types of research in policing? Is it the needs and pressures of practitioners, or the needs and interests of researchers? What academic infrastructures inhibit or encourage scholars to engage with practitioners? What forms can research take that make it more digestible and useable? Can funding programs that support researcher–practitioner collaboration (like Smart Policing and Project Safe Neighborhoods in the United States) significantly influence the generation of usable research?

Translational criminology also includes the evaluation of tools and ideas that are created to implement evidence-based policing or institutionalize research into practice. All of the tools and ideas in this book are subject to testing, including the Matrix, the Playbook, Case of Places, ideas for academy and field training, and activities for supervisors, leaders, and strategic planning. Just as we evaluate interventions used to reduce crime or improve police–citizen relations, so too can these activities be assessed for their ability to achieve evidence-based policing. //

Policing scholars may take some cues from other fields about how some of these questions might be studied. Weiss and Bucuvalas (1980) empirically examined receptivity to mental health research by decision makers through interviews about their views and use of research, and by examining whether factors such as attitudes, education, experience, and personal characteristics influence personal receptivity to research. Nutley, Walter, and Davies (2007) lay out different taxonomies of research use as well as different models of translation. These can also be examined and tested empirically in a criminal justice setting.

In policing, we already have some examples to build upon. A logical place to start might be examining the numerous research–practitioner partnerships in policing that have occurred over decades, as done by Alpert, Rojek, and Hansen

¹ See <https://www.crimesolutions.gov/>.

² See <http://www.gpd.uq.edu.au/search.php>.

(2013), Grieco, Vovak, and Lum (2014), or Rojek, Alpert, and Smith (2012a, see also Rojek, Smith, and Alpert 2012b). Some partnerships focus specifically on developing knowledge about the nature of crime or police processes with little expectation that research outputs will turn into actual police tactics once the research projects are complete. Other partnerships ground themselves in a training and technical assistance approach. Still others are ad hoc or are created by accident, with like-minded individuals from research and practice stumbling upon each other by happenstance. Understanding why partnerships develop, how they work, which types work best, what types of research come from which partnerships, and to what extent those partnerships turn into actual police practice are fruitful areas of translational research.

Another type of translational research we covered in Chapter 8, and which is also influenced by Weiss, Nutley, and colleagues, is the study of receptivity. What makes police personnel and organizations receptive to or dismissive of research? Here, both within-agency and across-agency research are important. For example, Lum, Telep, Koper et al. (2012) and Telep and Lum (2014) report on multiple agency-wide surveys asking questions related to officer interest, use, understanding, and knowledge about research and research processes. Receptivity studies like these can help us better understand how much practitioners know about research, how open they are to ideas from research, and whether they value scientific knowledge.

Case studies may also prove useful, especially across agencies that have consistently used or rejected a particular type of scientific evidence. For example, Birkeland, Murphy-Graham, and Weiss (2005) examined why evaluation findings of DARE (Drug Abuse Resistance Education) are often ignored by schools (see also Weiss, Murphy-Graham, and Birkeland 2005). They studied eight schools, six of which had continued to implement DARE despite negative evaluation results. As part of their study, they examined the reasons given for not abandoning DARE (and therefore, in a sense, rejecting the research findings). Some schools and police officials felt that the evaluations were measuring unrealistic program goals. Others felt that the evaluations overlooked the program's ability to build relationships between police, students, and their families.

Implementation research, an area of study in which scholars often use ethnographies and case studies, focuses on knowledge that arises from the implementation of evidence-based practices or other interventions that are being tested in the field. Many evaluation studies have already examined the factors that may contribute to successful or not-so-successful implementation and maintenance of evidence-based interventions. Some of these studies provide extensive documentation of either the implementation of a research design or the implementation of a practice based on scientific research. Implementation research is often better than other types of research at raising specific questions of interest in translational criminology.

Finally, police researchers are very familiar with program and outcome evaluation research, which are briefly described in Chapter 2. Those tools can also be

used to study the questions above to build the evidence base for implementing evidence-based policing.

Creating Strategies and Mechanisms for the Use of Research

Much of our book is focused on this second area of translational criminology—creating the strategies, mechanisms, and tools that facilitate the use of research. As we emphasize above, these tools also have to be evaluated and studied for their outcome effectiveness and implementation feasibility. But here we give police researchers some ideas, based on the activities we engage in, about creating mechanisms for research use. We return to Nutley et al. (2007), whose research review in the areas of public health, education, social work, and criminal justice has found five mechanisms that seem to emerge across the knowledge use literature. These are *dissemination*, *interaction*, *social influence*, *facilitation*, and *incentives and reinforcement*. As examples of these strategies, we highlight specific efforts that we have engaged in as researchers, many as part of our broader efforts for the Center for Evidence-Based Crime Policy (CEBCP).³ To their ideas, we also add some additional thoughts about the need for researchers to focus on *developing operational guidance* for practitioners in the spirit of what some refer to as the “engineering tradition” (Rossi, Lipsey, and Freeman 2004, 391).

Dissemination

Dissemination focuses on efforts to distribute research to practitioners, and to turn their eyes toward this outside source of knowledge. Because evidence-based policing is not simply about generating research knowledge, but also using that research, a translational approach to dissemination means that evidence-based policing researchers have to find other ways to disseminate research that extend beyond what Rossi et al. (2004) call “primary” dissemination (381) to more “secondary” dissemination options. Primary dissemination includes disseminating our work in scholarly journal articles and technical reports. Secondary dissemination includes distributing information through avenues created for wider audiences of stakeholders such as *The Police Chief* (International Association of Chiefs of Police), or *Translational Criminology Magazine* (the magazine of CEBCP, founded and edited by the first author).

Secondary written dissemination can also take the form of easy-to-digest summaries of research that are freely accessible to police practitioners. Many officers

³ See <http://www.cebc.org>. The first author is the Director of the Center for Evidence-Based Crime Policy at George Mason University and created many of these ideas as part of the translational criminology core of that center.

do not have library access to journal articles, nor have the time or specialized knowledge to read them. One idea we developed in the CEBCP is to distribute “one-pagers,”⁴ which reduce complex and lengthy research reports and journal articles into easy-to-read one-pagers. For example, take the Koper Curve article (Koper 1995). This article uses statistical jargon and a research design that may be hard for practitioners to understand. Thus, we created a much-shortened one-pager that summarizes the main points of the Koper Curve.⁵ These one-pagers are also similar to the individual summaries of research we set up for each study in the Matrix. For example, Rosenfeld, Deckard, and Blackburn’s (2014) study on the effects of directed patrol and self-initiated enforcement activities in our field’s top journal, *Criminology*, is described in an operational way for law enforcement in our Matrix, as is every other study in the Matrix.⁶

Dissemination can also be achieved by creating panels, briefings, symposia, and conferences for practitioners. These forums provide a place to learn about the most up-to-date and cutting-edge research, as well as to network with others. For example, in the CEBCP we have developed “congressional briefings” in which research experts present short, eight-minute briefs of research at the U.S. Capitol on a variety of policy topics of interest to practitioners and policymakers.⁷ Similarly, we developed the CEBCP annual symposium because no national conference existed that was freely available, that focused specifically on evidence-based crime policy, and that brought together researchers and practitioners to discuss practice-based research and translation. Researchers should also consider presenting at practitioner conferences to disseminate their work, such as the annual conferences held by the International Association of Chiefs of Police or the International Association of Crime Analysts.

Another form of dissemination we have developed are workshops in evidence-based policing, some which are supported by our funding from the Bureau of Justice Assistance for the Matrix Demonstration Projects, and some of which have been supported by law enforcement agencies and other organizations. Unlike conferences, symposia, or congressional briefings, workshops provide the opportunity to dig deeply into explaining the definition of evidence-based policing, the evidence base of policing, and translation and institutionalization efforts. Indeed, a great deal of this book began with ideas for workshops!

Many of the free congressional briefings, workshops, symposia, and special lectures we have created through the Matrix projects or in the CEBCP have been filmed. Videos are also an inexpensive way for agencies to bring specialized

⁴ See <http://cebc.org/one-pagers/>.

⁵ See <http://cebc.org/wp-content/onepagers/KoperHotSpots.pdf>.

⁶ See <http://cebc.org/evidence-based-policing/the-matrix/micro-places/micro-places-rosenfeld-et-al-2014-directed-patrol-plus-enforcement/>.

⁷ Examples of these briefings can be found here: <http://cebc.org/outreach-symposia-and-briefings/#cb>.

outsider knowledge into academies and in-service training. For example, in the CEBCP we have a freely available “video library” which anyone can access to learn about research.⁸ As we discussed in Chapter 14, we created some of these videos under the Matrix Demonstration Projects with the goal that they are used as points of discussion for more dynamic Compstat meetings, or for mini-training sessions at roll calls and within relevant units. Some of these videos are specifically designed for training, such as the training on the use of crime analysis for operations or commanders.⁹ Other videos are simply short, practitioner-oriented summaries of significant research evidence.¹⁰ These short videos, like the one-pagers, can be watched or read quickly in an officer’s non-committed time or at the beginning of roll calls or management meetings. Researchers might consider partnering with agencies to create more videos to help disseminate knowledge to the field.

Whether by one-pager, panel discussion, video, or magazine article, disseminating research using digestible, practitioner-friendly forms can be challenging. As academics, we are often unaccustomed to writing short, punchy, and interesting summaries of our work. A few important aspects of these summaries that researchers—including ourselves—often overlook are detailed descriptions of the interventions themselves, including how interventions were implemented. Short, bulleted conclusions and thoughts about what the research means to practitioners are also important. Researchers might consider partnering with practitioners to help with these tasks. Academics may find this challenging, as we also feel the need to cite to others, and discuss important nuances, exceptions, and limitations to our work. Maintaining integrity to our discipline and academic practices but at the same time effectively communicating our work to practitioners is therefore the main challenge for dissemination.

Interaction

The second mechanism that Nutley et al. (2007) describe as prevalent in effective research use strategies is interaction between researchers and practitioners. Researchers and practitioners can advance evidence-based policing by sharing the experience of building evidence together. We often take this idea for granted, given that almost all of the research in the Matrix was derived by researchers and practitioners partnering to carry out research projects in the field (as opposed to researchers obtaining data and analyzing it in a lab or office). But the interaction that occurs in field research is necessary for learning about evidence-based policing by both researchers and practitioners, and it is something that newer researchers may need help with. For researchers,

⁸ See <http://cebcp.org/cebcp-video-library/> or our YouTube site at <https://www.youtube.com/user/clsMason>.

⁹ See, e.g., <https://www.youtube.com/playlist?list=PLoqcclHgviI4zkWDi0ZJ829bQL4fbTvP>.

¹⁰ E.g., the Amendola, Weisburd, Hamilton et al. (2011) shift length study video can be found here: <https://www.youtube.com/watch?v=QGxKUYBANOA>.

including practitioners in every stage of program evaluation is an essential way to increase this interaction. This may mean including them in key decisions about the research process and design, and finding ways to increase the trust and confidence of practitioners toward researchers and research. Action research projects are also good examples of this, where researchers may work with police personnel to do background research on an issue, design and implement a project, evaluate and test interventions, and then adjust and re-evaluate those interventions based on ongoing findings. Doing so also increases the odds that researchers will carry out research that police agencies need. Weisburd and Neyroud (2011) go so far as to suggest that police take ownership of their own research agenda. And, as our receptivity research indicates, officers who have more exposure to doing research may be more receptive to evidence-based policing in the long run.

Fruitful interactions for evidence-based policing can occur in many other settings besides field research to achieve evidence-based policing. The workshops, symposia, conferences, and briefings that we mentioned above (and especially including practitioners on panels and as speakers) can increase regular interaction between researchers and practitioners (and also those who fund those partnerships). These settings also provide the opportunity for practitioners to tell researchers about their needs. Such interactions do not have to take place outside of the agency; police agencies can invite researchers into Compstat and other brainstorming meetings to provide expertise in developing crime prevention or community-oriented strategies that are evidence informed. Some Project Safe Neighborhood programs are designed to do this.¹¹ Researchers and practitioners can also interact in writing; one of the goals of the *Translational Criminology Magazine* is to encourage researcher-practitioner co-authors to write about examples of using research in practice.

Federal, state, and local governments, as well as private foundations can support this interaction. Examples include the federal Bureau of Justice Assistance's Smart Policing Initiative or a state's use of federal Justice Assistance Grant (JAG) funds to partner police agencies with researchers. The National Institute of Justice has also provided grant funding to encourage research-practitioner partnerships. Private foundations have supported advancing translational criminology through these partnerships as well. Perhaps the most well-known of such efforts is that of the William T. Grant Foundation.

An important translational question for evidence-based policing is whether these interactions can be maintained over an extended period of time and institutionalized into both the academe and police organizations. In some places, police agencies have tried to institutionalize more interaction with the research world by hiring criminologists. In other cases, criminologists have embedded themselves into agencies (Braga 2013). But interactions are primarily ad hoc or rely on centers like the CEBCP to facilitate them. Many interactions are also dependent on personal relationships, the personality of researchers and

¹¹ See <http://www.psnmsu.com/>.

practitioners, or other informal or intangible aspects. Formalizing interactions through memorandums of understanding, opportunities for each to participate on advisory boards of the other (e.g., like the research advisory board of the International Association of Chiefs of Police), or police leadership appointing academics to agency review boards or promotional committees (and vice versa) can help solidify such interaction over time.

Leveraging social influence

Nutley et al. (2007) also describe the use of social influence as a mechanism that seems to characterize successful uses of research in practice. As we discussed in Chapter 8, practitioners often receive their information from other practitioners, and agencies can be strongly influenced by what nearby agencies and their leaders are doing. Here, researchers might rely on thought leaders, influential individuals, and others to act as translators of research and proponents of the merits of evidence-based policing more generally. Part of the motivation for the Evidence-Based Policing Hall of Fame, as described in Chapter 14, is to identify leaders who are champions of evidence-based policing for others to emulate. Many are influential leaders and trendsetters in their own right, and their advocacy of evidence-based policing can be meaningful to other police officials. Other champions within police agencies can be crime analysts, planners, and officers and supervisors who have engaged in evidence-based policing and have benefited from its value. Researchers play a role in backing these individuals with recognition, new knowledge, and emotional support.

Researchers should also consider working with more challenging individuals in police agencies that may not buy into the ideas of evidence-based policing initially but who officers respect and follow. Our discussion of police sergeants and first-line supervisors in Chapter 14 is key here. They are often left out of discussions of change and reform in agencies, but they are highly influential individuals for effective implementation of reform efforts. First-line supervisors know their craft and know what is expected of them, and they can challenge many ideas in evidence-based policing. But because of their importance, working with them and engaging in discourse and debate with them may be critical in effectively increasing research use in policing.

Police constituent organizations can also be helpful in disseminating information and bringing practitioner eyes to research. National organizations like the Police Foundation, the International Association of Chiefs of Police (IACP), the Major City Chiefs Association (MCCA), the Police Executive Research Forum (PERF), the International Association of Crime Analysts (IACA), the International Association of Law Enforcement Planners (IALEP), the International Association of Directors of Law Enforcement Standards and Training (IADLEST), and many other organizations are well connected to their constituents and regularly provide information to them on a variety of topics. These organizations have played an increasing role in distilling and

disseminating research to law enforcement practitioners. Researchers might also consider regional groups as well, such as regional crime analyst associations,¹² councils of governments,¹³ and the like.

Facilitation

Nutley et al. (2007, 132) describe facilitation as “enabling the use of research, through technical, financial, organizational and emotional support.” Much of this links back to dissemination and interaction, discussed above, and focuses on making it easier for the police to access and understand research so as to increase the chance of its use. But facilitation takes dissemination and interaction one step further. For example, researchers sometimes create guidebooks of different sorts (particularly when their research is supported by government grant funding) to help practitioners understand how the findings of studies can be applied to practice and policy. Our Evidence-Based Policing Matrix provides another type of tool to facilitate research use, in addition to its role as a dissemination mechanism. It also can be used for evidence assessments or evaluations of the tactical portfolios of supervisors, units, or agencies. Recently, we have partnered with the Police Foundation to create the Evidence-Based Policing App, which makes the Matrix content smartphone-friendly.¹⁴

Many of the tools we present in this book are also facilitators. For example, the Playbook is a tool that tries to facilitate the use of multiple research findings in daily patrol. It takes a large body of research and converts it into operational directives in an easy to access format. Officers can print out the playbook and put it in their patrol cars, or access it on their phones or mobile computer terminals to get ideas about what evidence-based approaches they can engage in during their non-committed time. Of course, the Playbook is a type of facilitator that needs to be complemented by other facilitators to be successful. These include active supervision, adjusted performance metrics, and rewards and incentives that encourage officers to use the Playbook.

Yet another facilitator of research is the Case of Place tool. The Case of Place tool creates an investigative case folder structure that can be used by a detective unit to investigate a problem-place. Rather than hope officers and investigators know and learn the research and carry out steps to investigate a problem place, we created this tool to facilitate the use of this research in an investigative mode. Similarly, risk assessment tools are also facilitators. In Chapter 5, we discussed such tools used for domestic violence, which are built from research about risk. Crime analysts are also developing risk assessments when determining high-risk

¹² For example, the Massachusetts Association of Crime Analysts (<http://mactimeanalysts.org/>).

¹³ For example, the Metropolitan Washington Council of Government (<https://www.mwcog.org/>).

¹⁴ To access the free app, go to <https://www.microsoft.com/en-us/store/p/evidence-based-policing/9nblggh6cftl>.

locations for crime or high-risk victims. The question for translational criminology is what types of facilitation are most effective in getting practitioners to look at and use research, as well as for institutionalizing research into practice.

Incentives and reinforcement

In Chapter 14, we described in detail the ways that agencies can create incentive structures to facilitate evidence-based policing. But what can researchers do? First, researchers and their organizations can find ways to reward practitioners for engaging in research. This might be recognition for participating in research projects through commendation letters to chief executives, or it could be awards like the Evidence-Based Policing Hall of Fame or the Distinguished Achievement Award in Evidence-Based Crime Policy that we give from the CEBCP. All of these might provide incentives for practitioners to engage in evidence-based policing, even if others in their agency do not support them.

Federal grants provide monetary incentives for researchers and practitioners to work together. The Bureau of Justice Assistance's Smart Policing Initiative has now funded countless research partnerships, many which have resulted in studies that appear in the Matrix. Federal sources of funding to local agencies can also provide incentives to carry out evidence-based policing, although researchers have little to do with these decisions.

An important consideration for researchers is to determine up front how they might contribute to the needs of police agencies with which they work. This might be in providing expertise on particular topics. But more specific to their research partnership, it also means considering how a research project can benefit an agency partner and sharing the results of the research with the agency staff in a manner that is helpful to them. This could mean preparing clear, concise summaries and policy recommendations for the agency, offering to brief the agency's command staff on the study in person, allowing agency staff to view and comment on draft versions of the research, offering constructive suggestions for change when a particular strategy or policy is found to be ineffective, and being sensitive to the political and social context that may surround a particular evaluation study. An agency that feels it has gained something useful from a research collaboration will likely be more open to engaging in further research with outsiders.

Developing operational guidance

Finally, we add one additional mechanism to Nutley et al.'s list—that researchers might also increase practitioners' receptivity to research by giving further attention to developing studies that provide operationally useful guidance for police agencies (e.g., Koper 2013). This idea is similar to Nutley et al.'s (2007) concept of facilitation, but it perhaps requires a more subtle shift in how police scholars view their work. To use an example from Chapter 4, it is easy enough

to tell police that they should patrol more at crime hot spots, but police commanders will have numerous questions about how to operationalize this recommendation. How often should officers patrol hot spots? How long should they stay for each visit? How should officers time these visits? What should they do during these visits? And what should be the target dosage of patrol per day or per week? These sorts of operationally detailed questions are typically left unanswered in studies about hot spots policing as well as studies about many other types of police interventions; indeed, discussions of police interventions are often quite vague in police evaluations.

One likely reason that the Koper Curve (discussed in Chapter 4) has been embraced by many police agencies in the United States, the United Kingdom, and elsewhere is that it provides clear operational guidance for agencies to follow in doing hot spots policing (i.e., making periodic fifteen-minute patrol visits to micro hot spots). In this regard, police scholars may need to think more like engineers who use scientific principles (such as deterrence theory or environmental criminology) to create processes or technologies that will achieve desired ends for users (in this case, police). Evaluation experts Rossi and colleagues (2004) refer to this as an “engineering tradition” that must be further developed for applied researchers. As they state, “Engineers are distinguished from their ‘pure science’ counterparts by their concern with working out the details of how scientific knowledge can be used to grapple with real-life problems. It is one thing to know that gases expand when heated and that each gas has its own expansion coefficient; it is quite another to be able to use that principle to mass produce economical, high-quality gas turbine engines” (391). Additional attention to the operational details of police strategies in research studies—and thinking at the outset about how science can be used to develop interventions that also meet the practical needs and constraints faced by police—would almost certainly help agencies in adapting research to practice.

Future Prospects

Translational criminology is one way that researchers can contribute to advancing evidence-based policing. This area provides fertile ground for new ideas and research, as we have little empirical and systematic knowledge on how research gets translated into practice, and on the barriers, challenges, opportunities, and contexts related to how it happens. But perhaps an important preliminary question is whether scholars within our discipline of criminology and its sub-disciplines (like policing scholarship) are motivated to explore such questions.

Ultimately, the development of translational criminology for evidence-based policing relies on existing infrastructures of research supply and demand. Scholars (especially those pre-tenure) will seek research outlets that are most likely to publish their work. It is unclear whether the journals in our field would welcome translational research. In this way, criminology is

different from the medical, public health, or psychology fields that have journals devoted to translational science. Neither our *Translational Criminology* brief series by Springer nor our *Translational Criminology Magazine* are peer-reviewed outlets. Of the academic journals devoted to policing research, the closest journal to the translation concept is *Policing: A Journal of Research and Practice* (Oxford), which at the time of writing, remains unranked. Research published in practitioner journals may increase receptivity to research, but may not lead to any benefit for the academic researcher. On the demand side, it is also unclear whether law enforcement organizations might be interested in doing this type of primary research on translation. Receptivity to research may need to be established first in order for agencies to pursue related studies on translation.

One thing is certain: Pursuing translational criminology as study or as action will require a great deal of help (and interest) from our colleagues in practice as well as a cultural change in what young scholars value as "research" and how they are rewarded. This goes not only for the study of evidence-based policing, but also for its practice.