Translational Criminology

SPRING 2020

Promoting knowledge exchange to shape criminal justice research, practice, and policy

Inside this issue…

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FROM THE DIRECTORS

Welcome to the spring issue of *Translational Criminology* in the new decade! For those who might be keeping track, this is our 18th issue of *TC* since it first transformed from our center's newsletter to the magazine it is today. Thanks to those who contributed articles to the magazine over the years, and to those who have helped to financially support the magazine so that we can continue to provide it free to the public. If you have enjoyed receiving the magazine and would like to help keep it going for the next 10 years, please consider contributing to its publication at cebcp.org/contributing.

One important piece of news for our community that developed just before *TC* went to print is that we had to cancel the 2020 CEBCP Symposium due to growing concerns over the coronavirus (COVID-19). We look forward to picking up on our planned theme, "The Value of Partnerships to Criminal Justice Policy," at the next annual symposium in 2021.

In this issue, we highlight a number of research-practitioner partnerships and examples of research evidence being used in practice. David Weisburd and Charlotte Gill write about their work in community crime prevention and suggest—provocatively—that perhaps community policing has had a stronger impact than previous reviews have concluded. Our colleagues at WestEd, led by Staci Wendt, describe a program they have been tracking and evaluating to improve juvenile health and outcomes in juvenile correctional systems. Cynthia Lum, Christopher Koper, and their students present findings from their recent systematic observations of public safety communications dispatchers—an often overlooked group in policing studies, but one essential to police deployment. Michael Pfeiffer and Geoff Alpert showcase the work that the New Orleans Police Department is doing to bring the science of police pursuits to the forefront and use that knowledge to improve accountability for such pursuits in police agencies. And our colleague John Rosiak discusses the differences between mobile and assigned school resource officers. We also highlight recent CEBCP researchers Sangjun Park, Amber Scherer, and Xiaoyun Wu, who have graduated with their doctorates and who have helped us with many of our research partnerships. We hope you will enjoy reading about them and the future of our field!

One special partnership highlighted in this issue was our efforts with Dan Nagin at Carnegie Mellon University to bring to light the need for more research and data collection in the arena of mass violence. This past year, the CEBCP intentionally invested our efforts in this area, under the leadership of Professor Christopher Koper, principal fellow of the CEBCP. With support from the National Science Foundation (NSF), we were able to bring together the nation's top experts to convene an NSF workshop to produce 16 papers in the American Society of Criminology's flagship policy journal, *Criminology & Public Policy* (whose editorial leadership is now housed at the CEBCP). These papers appeared in the first issue of *CPP* this year and can be accessed freely at bit.ly/NSFpapers. Additionally, with support from the Harry Frank Guggenheim Foundation, we also convened a CEBCP Congressional Briefing on this topic, which attracted almost 300 registrants, many from inside Congress. We view this past year's work as a start to our commitment to this issue, and we will be pursuing research funding and further activities in this area. This is one of the most concerning public policy issues that we face in the United States. it with science—not fear and speculation—will be important as we try to mitigate this problem in the future.

Finally, John Eck and Michael Scott write a moving tribute to Professor Herman Goldstein, whom we lost in January. Professor Goldstein was the 2015 recipient of the CEBCP's Distinguished Achievement Award in Evidence-Based Crime Policy. He embodied all that we aspire to think about and be here at the center, and was at the forefront of developing a more scientific approach to criminal justice policy. Rest in peace, Professor Goldstein.

Cynthia Lum
Director and Editor of *Translational Criminology*

David Weisburd
Executive Director

CEBCP faculty and students

The Center for Evidence-Based Crime Policy

Since 2008, the Center for Evidence-Based Crime Policy, housed within Mason's Department of Criminology, Law and Society, has been committed to providing its university, local, regional, state, national, and international communities with rigorous research and innovative research translation tools to shape criminal justice policy.

CEBCP graduate research assistants conduct hands-on research in the field, through collaborations with justice agencies and world-renowned criminologists who specialize in crime prevention, policing, communities, technology, firearms violence, criminal justice policy, the courts, school-based prevention, translational criminology, program evaluation, and experimental criminology.

To learn more about our research programs, projects, annual symposia, congressional briefings, and the more than two dozen faculty and students who collaborate in the CEBCP, go to **cebcp.org**.

GEORGE MASON UNIVERSITY

Rethinking the Conclusion that Community Policing Does Not Reduce Crime: Experimental Evidence of Crime Reporting Inflation

BY DAVID WEISBURD AND CHARLOTTE GILL

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David Weisburd   Charlotte Gill

In evidence-based policy there are no more important organizations than the Campbell Collaboration and the National Academies of Sciences. Campbell emphasizes systematic review and meta-analyses, taking a rigorous approach to identifying, coding, and analyzing prior studies. The National Academies takes a narrative approach to review, relying on experts to assess existing evidence, and providing a consensus set of conclusions.

Both of these organizations have reviewed the evidence on the crime control effectiveness of community policing, and both have concluded that it is not an evidence-based strategy to reduce crime. Gill, Weisburd, Telep, Vitter, and Bennett (2014), in a Campbell systematic review that covered studies until 2012 and included 37 studies in a meta-analysis, noted that "We do not find evidence that COP reduces…officially recorded crime" (p. 423). In a more recent review, the National Academies of Sciences Committee on Proactive Policing (Weisburd and Majmundar, 2018), concluded that "existing studies do not identify a consistent crime prevention benefit for community-oriented policing programs" (p. 176).

These reviews have had a major impact on how we view the crime prevention benefits of community policing programs. In sum, they have led to the prevailing assumption that science does not support the view that community policing reduces crime.

However, it is important to note that the same reviews also concluded that community policing significantly improves community members' satisfaction with the police and positively influences their perceptions of police legitimacy. We believe that estimates of the crime prevention benefits of community policing are likely confounded by these impacts. The main measures that researchers use to estimate crime outcomes (calls for service and crime incidents) are

likely impacted not only by whether crime is reduced, but also by the fact that community policing is likely to increase collaboration of the public with the police—indeed, that is one of the expressed goals of community policing programs.

Recently, we completed an experiment in Brooklyn Park, Minnesota (see Weisburd, Gill, Wooditch, Barritt, and Murphy, 2020), that led us to rethink the strong conclusions existing reviews have reached regarding the failure of community policing to show strong crime prevention benefits. The Brooklyn Park experiment was not specifically identified as a study to advance community policing, but it had a strong focus on community collaboration—a key component of community policing—as a way to advance crime control. It sought to use unallocated police patrol time to increase collective action and community collaboration in solving problems at crime hot spots. The program was called Assets Coming Together to Take Action (ACT). ACT was intended to work through officers encouraging three key mechanisms at the hot spots:

(1) establishing proximal relationships with and between residents;

(2) increasing working trust between the police and community members; and

(3) developing shared expectations that empower residents to take action against problems and then leveraging these mechanisms to develop successful collaborative problem-solving strategies.

While ACT shares many similarities with established community and problem-oriented policing strategies, the overall goal of the approach was to create a "culture of responsibility" within the

community by connecting police interventions with the development of informal social controls. (Weisburd et al., 2020:6)

In some sense ACT provided an optimal test of the idea of community collaboration. The intervention involved the entire patrol force in Brooklyn Park, a city with more than 100 sworn officers. Accordingly, it had a very high level of dosage at each of the 21 treatment hot spots, with more than 1,000 activities documented during the experimental period. Perhaps most importantly, from the perspective of community collaboration, the officers identified 405 "assets" at the 21 hot spots, with a median of 18 assets at each hot spot. Assets were key stakeholders and resources that officers identified during their time spent at the hot spots who were willing and interested in working with police officers to address problems.

Our experimental analyses show that the police did succeed at increasing community collaboration and collective action in doing something about problems. When we asked a random sample of citizens at the hot spots whether they had participated in problem-solving efforts during the experimental period, a significantly larger number of respondents in the treatment hot spots said that they had. And when we asked whether they had spoken to a police officer about a problem, again a significantly larger number of residents of the treatment hot spots responded affirmatively. These results suggest that ACT was successful in increasing community collaboration.

But when we looked at the crime outcomes of the program, we did not find evidence of crime prevention. Like community policing programs that also seek to influence community collaboration, there did not appear to be crime prevention benefits from ACT. Indeed, the treatment and control hot spots had about the same changes in crime incidents (i.e., Part I and Part II crimes for which a police crime report is written) from the pretreatment to treatment periods.

What Happened?

Because of the valuable participation of Lieutenant William Barritt, who was the departmental coordinator of the experiment in Brooklyn Park, and Jody Murphy, the head of crime analysis in the Brooklyn Park Police Department (BPPD), we were able to get additional insight into what had happened. We noticed at the start of the experiment that the number of emergency calls for police service had increased a good deal in the treatment hot spots. We did not think that there was a reason why crime should have increased. This was a randomized experiment, and though that could happen just by chance, another explanation was that the experimental intervention was increasing the reporting of crime to the police. The strong effort to identify assets and increase community collaboration more generally provided a plausible causal chain that would lead the experiment to increase crime reporting.

Barritt and Murphy noted that they could look at this directly by examining the call behavior of assets in the experiment. While this was a difficult task that had to be done by hand, they went back and looked at the number of times that assets had called the police

during the experimental period, and the number of times they had called before the experimental period. The results are reported by hot spot in the table below. What is apparent is that assets called the police more than 700 times during the experimental period. On average across the treatment sites, more than a third of the assets who called the police had never called before.

Assets Who Called the Police in 2015 and through October 31, 2016

Site #	Number of assets	% of assets who called police during this period	Number of calls by assets or their family members during this period	% of assets who called during this period but had never called BPPD before
1	7	42	3	75
2	11	27	20	33
3	11	9	9	0
4	12	23	3	33
5	13	50	35	50
6	13	18	76	33
7	13	23	4	66
8	14	56	50	56
9	15	53	35	38
10	16	40	20	33
11	18	83	43	28
12	18	47	22	13
13	20	75	61	47
14	23	42	14	40
15	23	52	35	42
16	24	66	107	33
17	25	36	13	55
18	25	54	35	77
19	26	50	61	50
20	38	63	173	50
21	40	51	55	15

These findings suggested that we had good evidence that the community collaboration component of the program had increased crime reporting of citizens in the treatment hot spots. But could we create a measure that would reflect the extent of this increase? One simple way to do this was to compare the number of citizen-initiated calls for service (CFS) to crime incidents before the experiment and during the experiment. We call this "crime reporting inflation," which is represented by the following equation:

$$\text{Crime reporting inflation} = \frac{(CFS_{during} - Incident_{during})}{(CFS_{before} - Incident_{before})}$$

If the experimental intervention was not having an influence on crime reporting, we would expect the treatment and control hot spots to have about the same score on this measure. That is, in a world in which we did not intervene, the randomly allocated hot spots would be expected to behave similarly in both groups in the pre-experimental and experimental periods. If the experimental period and the pre-experimental period were equal in length, we would expect the outcome of our measure to be 1. However, the experimental period was 16 months and the pre-experimental period was 12 months. This means that, absent treatment in our experiment, we would expect the crime reporting inflation statistic to equal 1.33 (16/12), accounting for the fact that the gap between calls and incidents is being counted for an additional four months during the experimental period.

For the untreated control hot spots, the crime reporting statistic equals 1.27, about what we expected. However, for the experimental hot spots that received ACT, the inflation statistic was 1.67. This reflects a strong degree of crime inflation for the treatment condition, and the difference between the groups is statistically significant at the 0.05 level. This is the first experimental evidence of the reactivity of crime outcomes to interventions that emphasize community collaboration that we are aware of. Combined with our survey results regarding community collaboration and the analyses of the behavior of assets, our findings provide strong evidence that an intervention that encourages community collaboration is likely to strongly influence reporting behavior.

What could be the cause of this crime inflation? Of course, one explanation could be that crime increased in the treatment condition and therefore citizens called the police more. While this could be an explanation, we have no reason to believe that the ACT intervention would increase crime. Moreover, we are not measuring here whether calls increased, but whether the relationship between calls and crime incidents changed. Why would the gap be so much larger in the treatment condition than the control condition? And why would the measure of crime reporting inflation in the control condition remain relatively stable between the pre-experimental and experimental periods and the treatment condition increase to a large degree? If the treatment was having no impact we would expect the two groups to be similar in a randomized experiment.

We think that the control condition represents a "normal condition" for the relationship between crime calls and crime incidents. In general, that relationship would be expected to be positive on our measure because, in normal circumstances, a number of the calls that citizens make to the police are not founded once police come to investigate. What our experimental intervention did was to increase the number of calls beyond the "normal condition," creating an upward bias in assessing crime in the treatment hot spots. This upward bias may be obscuring real crime changes.

But what does this mean in terms of the program's impacts on crime? Would our conclusions regarding the crime prevention impacts of ACT change if we could adjust the crime counts for crime inflation? We tried to do this by adjusting the crime incident outcomes in the experimental condition by the overall crime inflation ratio for the two groups (1.27/1.67).[1] When we do this, our findings regarding crime are quite different. The difference between the groups is now statistically significant at the 0.10 level (p=0.055), the threshold we set at the outset of the experiment.

While we think these findings are important for assessing ACT, they are even more important for their implications more generally for studies where community collaboration is an important element. Our findings suggest that using raw uncorrected official crime data to assess crime outcomes of community policing programs likely leads to large underestimates of crime prevention outcomes.

And what does this mean for the evidence-based conclusions of the Campbell Collaboration and the National Academies? Our work suggests that it is time to reconsider that literature in light of the Brooklyn Park findings. Assessment of the crime prevention impacts of community policing must be carried out with the aim of correcting for crime reporting inflation.

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[1] Another approach would be to adjust outcomes not by a global measure but by the specific outcomes for each hot spot. The problem of doing this is that the crime outcomes are part of the crime inflation measure. For this reason, we chose to use the overall global estimate in our analyses. Our colleague Cynthia Lum raised the question of whether this measure is also affected by actual reductions in crime. In this context, if crime is reduced the gap between calls and crimes should grow even larger. But in this context, we might also expect the number of calls to decline as crime problems decline. These complexities suggest the importance of exploring and refining this measure in future studies.

The Anatomy of a Multiagency Research and Practice Partnership to Evaluate Juvenile Correctional Innovations

BY STACI J. WENDT, DUSTYN PEDERSON, HAYLEY TEWS, ANTHONY PETROSINO, AND PAMELA MACDOUGALL

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Although teen pregnancy rates have declined in recent years, certain populations remain particularly vulnerable to unintended pregnancy and early fatherhood due to lifestyles that promote risky behavior (Ventura et al., 2014). Becoming a teen parent is associated with fewer years of schooling and a lower likelihood of attaining a high school diploma (Fletcher and Wolfe, 2012). Teen parents are also more likely to have a lower income and not be married or cohabitating with their partners, and for teen fathers, less than half live with their children at the time of birth (Scott et al., 2012). In addition to the negative impacts for teen parents themselves, children of incarcerated fathers also experience a host of negative impacts. A recent study found that children whose fathers were incarcerated before that child was five years old were more likely to be suspended or expelled from elementary school; this finding remained even when compared to children whose fathers were absent from their home, but not incarcerated (Wade, 2019). Despite these negative impacts, few teen pregnancy prevention programs target young men, and fewer target youthful offenders.

One reason for the lack of sexual health education within juvenile justice facilities is that implementing sexual health education programs can be challenging. There are costs for providing workshops or bringing in expert facilitators. Facilities may be in rural areas, making travel for treatment providers difficult. Bringing outside facilitators into a closed custody facility also requires additional background checks and security procedures. Finally, sexual health curriculum must appeal to youths and actively engage them in the content.

These and other gaps in programming inspired a partnership of three organizations. These included WestEd, a nonpartisan nonprofit research, development, and service agency focused on strengthening the capacity of institutions throughout the community to support children, youth, and families; the Oregon Youth Authority (OYA), Oregon's state-level, juvenile justice agency known for its rehabilitation model in juvenile justice; and Efficacity, a health education company with a history of building media, games, and technology for underserved and high-need populations. The Office of Population Affairs, which is within the U.S. Department of Health and Human Services' Office of the Assistant Secretary for Health, funded this partnership (contract TPA2AH000029-01-01) to develop and assess the impact of a tablet-based teen pregnancy prevention app, developed in collaboration with and targeting young men, ages 14 to 19, who are currently in OYA's care.[1]

The tablet-based intervention developed and tested in this project is *Healthy U*, a three- to four-hour evidence-informed, self-directed sexual health program on a virtual campus designed specifically for male youths at OYA, ages 14 to 19. *Healthy U* is aligned to the

CDC's National Health Education Standards and permits flexible implementation. *Healthy U* includes dramatic videos, interactive games, and learning challenges to cover pregnancy, birth control, puberty, STDs, HIV, condom negotiation, and healthy relationships.[2]

Secrets to Successful Partnerships

There have been a number of positive findings and lessons learned so far in developing the crossagency partnership, including obtaining youth and staff feedback in the development of the app, and successfully implementing a multisite cluster-randomized control trial (findings forthcoming) to examine the impact of *Healthy U* on decreasing unplanned teen fatherhood and increasing healthy relationships. To successfully develop *Healthy U* and implement the study, the project partners took steps to gain buy-in from youths and staff throughout OYA.

In-person communication. Building relationships between partners early on through face-to-face meetings at each step of the project was paramount to successful implementation. For example, during the first months of the project, the partnership hosted an in-person meeting for the team to get to know each other, to begin learning communication styles, and to build trust. The relationships formed during this meeting proved foundational for open communication and collaboration throughout the project period. During that kickoff meeting, the team codeveloped a project timeline. Next, OYA hosted the partnership at its largest facility (serving approximately 270 youths). The team participated in a youth-led tour and spent the day with a group of young residents discussing sexual health and healthy relationships. Efficacity collected youth feedback on videos and activities that would eventually become part of *Healthy U*. Working with Efficacity, youths developed a storyboard based on their own experi-

ences, which was later turned into one of the dramatic videos on the app. During this visit, the team also met with OYA facility staff who provided contextual information about how to best implement the app and the corresponding research study. It was during this time that staff also expressed concerns about implementing an additional program on top of their other duties and how they would personally be able to engage youths in *Healthy U*.

Simultaneously, the WestEd team met with several OYA central office departments to develop relationships and talk through the implementation of a rigorous study. WestEd met with Information Services to discuss internet access at the facilities and how to upload data from the tablets to the server. WestEd also met with the Business Integration team to discuss OYA data that would be transferred to WestEd (e.g., contact information for youth once they left a facility). Meetings with Accounting were held to develop a protocol for processing stipends given to youths in exchange for their participation in the research study. WestEd also met with Facility Services to discuss how to protect time in the day for the implementation of *Healthy U*. OYA's Community Services helped to develop a protocol for contacting youth to complete a follow-up survey after the individual had been released from close-custody facilities and was back in the community.

Scheduled, regular communication. The team (WestEd, OYA, Efficacity) set up methods for regular check-ins and adjusted the regular communication schedule as necessary. The WestEd team also met annually in person with OYA leadership to give progress updates and findings. The scheduled communication opportunities provided a time and place to discuss challenges and address them as they arose. They also served as opportunities to celebrate wins together. In short, the communications helped to grow trust, problem-solve challenges, and build further mutual commitment to the project.

Research design. The grant required that a rigorously designed study be used to test the innovation developed. During the first several months of the project, the WestEd team brainstormed research design options with OYA staff including the Research Unit, the Facility Management teams, and other OYA central office departments (e.g., Information Services). It was determined that living units within facilities provided natural clusters and the opportunity to employ a cluster-randomized design. Additionally, because there were multiple facilities in varying geographic locations serving different youth populations, the team decided to implement a block-randomized design to reduce any potential imbalance in the types of living units in the treatment and control groups. Finally, to reduce the burden on the OYA Research Unit and the other central office departments, the team decided to implement the study in "waves" (i.e., only one facility participated in the study at a time). Each facility served as its own block and the living units within the facility were the clusters. One facility would implement the study for a three-month period and then take a three-month break. Implementation would return to the facility after this three-month period.

The development of the wave-cohort design eased implementation and allowed each facility to make some slight variations to implementation. For example, some facilities preferred to provide *Healthy U* to youths in the treatment condition every Sunday for a few hours. Other facilities preferred to provide *Healthy U* to one or two youths at a time. The flexibility in implementation was key in gaining buy-in from facility staff. At one facility, implementation was difficult due to lack of engagement from staff. When this issue was identified, the OYA Research Unit and WestEd team met with the staff at this facility to discuss the reasons for their resistance in an attempt to increase their engagement. When staff overload was identified as the critical reason, the OYA Research Unit and WestEd team adapted implementation so that the OYA Research Unit and members of the WestEd team would be onsite to implement *Healthy U* and nearly eliminate burden on local facility staff.

Piloting. Prior to full-scale implementation, we conducted a two-month pilot. The purpose of the pilot was to test a preliminary version of *Healthy U*, the research design implementation, and obtain relevant youth and staff feedback. This provided an opportunity to learn what the challenges were going to be. For example, *Healthy U* was originally designed to be utilized with Wi-Fi so that youths' progress was uploaded to an external server; this would allow multiple youths to use the same tablet. However, Wi-Fi access is significantly restricted in OYA facilities to limit the youths' access to the internet. To access Wi-Fi, the youths needed to be relocated to a building with such access, resulting in major disruptions in daily schedules. To address this challenge, Efficacity changed *Healthy U* so that youth progress was stored on the tablet device rather than automatically uploaded via Wi-Fi. This meant, however, that each youth needed an individual tablet. The OYA Information Services team set up a secure, staff-only Wi-Fi specifically for *Healthy U* within each living unit. At the end of each *Healthy U* session, unit staff would use this Wi-Fi to upload youth progress to the external server. Although there was an increase in costs associated with providing a tablet for each youth, this was mitigated by the wave design, which allowed for the tablets to be rotated from one facility to another.

The pilot also provided the opportunity to hear youths' reactions to using *Healthy U*. Youths shared their experiences with their unit staff, WestEd, and Efficacity directly and through anonymous surveys. The feedback was incorporated into the app's final version. Youths also provided feedback on the incentive amount that would secure their participation and the appropriateness of pre- and post-test survey questions.

Training. Before each study wave, Efficacity, WestEd, and the OYA Research Unit visited each facility for two days to meet staff, provide a demonstration of *Healthy U*, train unit staff on implementing the app, and assist with identifying and enrolling eligible participants. Prior to each in-person training, WestEd held a phone call with facility staff to discuss the training agenda and logistics. These meetings provided an opportunity to hear any concerns prior to training and to adjust schedules if necessary. During the training, Efficacity facilitated an immersive training of the tablets and *Healthy U*. Staff were able to interact with the program and pose questions directly to the developer. Staff were also given an implementation manual with easy-to-understand, step-by-step instructions. One of the biggest sources of buy-in was seeing *Healthy U* in action. Staff identified a need for a curriculum like *Healthy U* and liked the experience of the tech-based approach. The second day was spent assisting unit staff with enrolling youths. During this process, staff were able to see how engaged youths were in *Healthy U*, further enhancing staff buy-in. Additional trainings (on site or via phone calls) occurred at the beginning of each wave.

Conclusions

Although complex field trials in juvenile correctional facilities are not easy to implement, the partnership and strategies we undertook facilitated a successful implementation of a randomized controlled trial involving more than 300 OYA youths. Good communication helped secure the support of nearly all staff. During the three-month breaks in study waves, staff members and youths equally expressed their excitement to see *Healthy U* return to their facility. This was because *Healthy U* engaged youths. The young men who participated were largely focused, asked good questions, and were genuinely stunned about some of their misconceptions regarding sexual health. In conclusion, through open and frequent communication that built trust among all project partners, youth engagement, and flexible implementation, we successfully implemented a multisite cluster-randomized control trial within a juvenile justice setting.

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[1] Disclaimer: The views expressed in written training materials, publications, or presentations by speakers and moderators do not necessarily reflect the official policies of the Department of Health and Human Services; nor does mention of trade names, commercial practices, or organizations imply endorsement by the U.S. government.
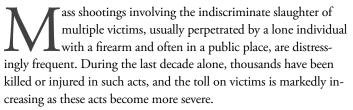
[2] https://www.healthyucampus.org/

Countering Mass Shootings in the United States

BY DANIEL NAGIN, CHRISTOPHER S. KOPER, AND CYNTHIA LUM

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Daniel Nagin   Christopher S. Koper   Cynthia Lum

Mass shootings involving the indiscriminate slaughter of multiple victims, usually perpetrated by a lone individual with a firearm and often in a public place, are distressingly frequent. During the last decade alone, thousands have been killed or injured in such acts, and the toll on victims is markedly increasing as these acts become more severe.

The Center for Evidence-Based Crime Policy, in collaboration with Carnegie Mellon University, committed significant resources in 2019 to raise awareness in the research and policy communities about the need for more research and data on mass shootings. The centerpiece of this effort was a workshop in spring 2019 that was supported by the National Science Foundation's Law and Social Science Program. The workshop brought together diverse experts from a variety of fields (e.g., criminology, psychology, statistics, economics) and sectors (i.e., academic, government, and nonprofit) to present and discuss papers written by participants on the various aspects of this vexing public policy problem. The workshop's aim was to develop a policy and research agenda for curtailing mass shootings. Toward this aim, papers were commissioned that 1) reviewed research that has been conducted on mass violence; 2) determined points of consensus in the available research; 3) identified gaps in research knowledge and points of substantial disagreement; 4) laid out policy implications of established research knowledge; and 5) developed research recommendations to address knowledge gaps and controversies in the field.

The workshop explored six areas, including patterns of mass violence; data sources, methods, and challenges in measuring mass violence; causes of mass violence; settings of mass violence; weaponry access; and other methods and technologies for identifying and intervening with potential perpetrators. For two days, the mix of researchers and practitioners discussed, debated, and shared knowledge about

these areas. Their efforts culminated in 16 papers, published in a very special issue of *Criminology & Public Policy*, connecting its outgoing (Nagin) and incoming (Lum and Koper) editorial teams. To view and freely access the entire special issue, go to bit.ly/CPPSpecial, or see the sidebar for a list of all titles and authors.

The papers show that there are many important areas of research and policy development under way on this topic that can inform both future research and current policy and practice. Of course, much more information is needed, but these efforts reflect an important start to tackling this difficult issue. In the introduction to the special issue, we discuss five recommendations that are supported by the research evidence presented and that are feasible to achieve with sufficient political will. These are:

1. **Staunching the growth of high-capacity firearms:** While there are rational public safety grounds for restricting firearms with a variety of military-style features, we believe the most important components of assault weapon laws are restrictions on large-capacity ammunition magazines that enable shooters to discharge large numbers of rounds very rapidly and thereby kill or injure many in minutes or less. To staunch this growth, we recommended for new sales to limit magazine capacity to 10 rounds and to prohibit weapon accessories that increase the discharge rate of semiautomatic weapons.

2. **Curtailing access to firearms for individuals who are a danger to others or themselves:** To do this, universal background checks should be instated for all firearm purchases including private sales. This is most effective when done through licensing and permit systems for firearms owners. Extreme risk protection orders (ERPOs) should be adopted to disarm high-risk

individuals. Firearm restrictions should be strengthened for convicted domestic violence offenders and others who are subject to domestic violence restraining orders. Finally, monitoring systems are needed to detect individuals making large and/or frequent purchases of firearms and ammunition with referrals of such individuals to law enforcement risk assessment teams.

3. **Improving threat detection systems:** Threats can be "leaked" by would-be offenders during a planning stage of an attack in conversation, on social media, or through other observable actions. Threat detection systems need to be improved to detect and respond to leakage. Other more diffuse threats may be harder to detect. Finding the most effective approaches to respond to such threats also requires more evaluation research.

4. **Reducing fatalities at mass shooting events:** When mass shootings can't be prevented, the harm caused by them can be reduced. Speedy medical treatment by both medical and non-medical personnel can make the difference in a life saved. This requires drills and preparation by not only medical staff, but school staff, law enforcement, and many other guardians and members of the public. Resources to support such activities should be increased.

5. **Formally tracking mass violence:** Despite the seriousness of mass shootings in the United States, there is no official national data system that tracks either the occurrence of mass casualty events or the response to them. The Bureau of Justice Statistics or the Federal Bureau of Investigations may be in the best position to collect detailed data on victims, offenders, weapons used, situational characteristics, and public safety responses.

In addition to publication in *Criminology & Public Policy*, the results from the project were extensively disseminated and translated to practitioners and policy makers alike, first at the 2019 CEBCP Symposium, and then at the CEBCP's annual Congressional Briefing organized at the U.S. Capitol in September 2019 with funding from the Harry Frank Guggenheim Foundation. Eight of the researchers from the special issue gave briefs to a full house of congressional staff members, practitioners, policy makers, researchers, and members of the public and the media on what we know from research about mass shootings. Almost 300 people registered for this congressional briefing, emphasizing its significance. Chief Dan Oates, former police chief during the Aurora, Colorado, movie theater shooting,

provided a powerful introduction of the real effects of mass violence. The entire briefing, as with all of CEBCP's briefings, was filmed and can be viewed at bit.ly/CEBCPBriefing.

Mass shootings have become one of the most alarming and defining crime issues of the 21st century in the United States. Because of the frightening nature of these events, assumptions and assertions are often made about perpetrators and victims that are not supported by the evidence. More knowledge is needed about the prevalence and etiology of mass shootings and how society can best prevent and respond to these acts. The Center for Evidence-Based Crime Policy is proud to be a part of advancing awareness of the science around this important concern.

Criminology & Public Policy February 2020 Issue Titles

1. Policy recommendations for countering mass shootings in the United States. *Daniel S. Nagin, Christopher S. Koper, and Cynthia Lum.*

2. Patterns and prevalence of lethal mass violence. *Grant Duwe.*

3. Why have public mass shootings become more deadly?: Assessing how perpetrators' motives and methods have changed over time. *Adam Lankford and James Silver.*

4. Desperate identities: A bio-psycho-social analysis of perpetrators of mass violence. *Peter Langman.*

5. What role does serious mental illness play in mass shootings, and how should we address it? *Jennifer Skeem and Edward Mulvey.*

6. Identifying high-risk firearm owners to prevent mass violence. *Hannah S. Laqueur and Garen J. Wintemute.*

7. Potential to prevent mass shootings through domestic violence firearm restrictions. *April M. Zeoli and Jennifer K. Paruk.*

8. Assessing the potential to reduce deaths and injuries from mass shootings through restrictions on assault weapons and other high-capacity semiautomatic firearms. *Christopher S. Koper.*

9. Evidence concerning the regulation of firearms design, sale, and carrying on fatal mass shootings in the United States. *Daniel W. Webster, Alexander D. McCourt, Cassandra K. Crifasi, Marisa D. Booty, and Elizabeth A. Stuart.*

10. Algorithmic approach to forecasting rare violent events: An illustration based in intimate partner violence perpetration. *Richard A. Berk and Susan B. Sorenson.*

11. Threat assessment as a school violence prevention strategy. *Dewey G. Cornell.*

12. Space between concern and crime: Two recommendations for promoting the adoption of the threat assessment model and encouraging bystander reporting. *James Silver.*

13. Investigating the applicability of situational crime prevention to the public mass violence context. *Joshua D. Freilich, Steven M. Chermak, and Brent R. Klein.*

14. Rapid response to mass shootings: A review and recommendations. *Paul M. Reeping, Sara Jacoby, Sonali Rajan, and Charles C. Branas.*

15. The devil's in the details: Measuring mass violence. *Lin Huff-Corzine and Jay Corzine.*

16. Responses to mass shooting events: The interplay between the media and the public. *Arie Croitoru, Sara Kien, Ron Mahabir, Jacek Radzikowski, Andrew Crooks, Ross Schuchard, Tatyanna Begay, Ashley Lee, Alex Bettios, and Anthony Stefanidis.*

The World of Emergency Calltakers and Dispatchers

BY CYNTHIA LUM, CHRISTOPHER KOPER, MEGAN STOLTZ, MICHAEL GOODIER,
WILLIAM JOHNSON, HEATHER PRINCE, AND XIAOYUN WU

*Doctoral students **Megan Stoltz**, **Michael Goodier**, **Bill Johnson**, **Heather Prince**, and **Xiaoyun Wu**, with Professors **Cynthia Lum** and **Christopher S. Koper**, collaborated as a team on this project. They are members of the Center for Evidence-Based Crime Policy in the Department of Criminology, Law and Society at George Mason University. This study was conducted in partnership with the Fairfax County Department of Public Safety Communications (DPSC), led by Director Roy Oliver.*

Public safety communications specialists are rarely studied in criminology compared to their police counterparts (well-known exceptions include Chaiken and Larson, 1972; Manning, 1988; Worden, 1993; Mazerolle et al., 2002; McEwen, 2002). Yet, the calltakers and dispatchers that manage our 911 and nonemergency calls for service are a major part of the criminal justice system and public safety. Before and since Lyndon Johnson's 1967 crime commission established "9-1-1" as the nation's emergency call number, calltakers and dispatchers have played an integral role in the allocation of police, fire, and medical resources for public safety. Depending on their size, jurisdictions can receive tens or hundreds of thousands—sometimes millions—of these calls annually. To put this into perspective, research studies reviewed by Neusteter et al. (2019) find this equates to about one to two emergency and nonemergency calls for service per capita per year in some jurisdictions. For uniformed patrol officers, these calls determine many of the activities that they carry out during their shifts, and, ultimately, the public safety resources that are allocated to communities. The recording of calls and their responses in computer-aided dispatch (CAD) systems results in one of the largest sources of data on public safety services collected by municipalities.

Public safety communications departments, therefore, have a large footprint in the criminal justice system, and their efforts and decision making matter in terms of how police resources are deployed. Understanding what people call the police for and how calltakers and dispatchers manage those calls are an important part of understanding what patrol officers and investigators spend their time on, and how those responses contribute to the overall deployment landscape of the police.

To explore these ideas, we carried out what we believe is one of the first systematic observation studies of calltakers and dispatchers in criminology with support from Arnold Ventures (Lum et al., 2020). We partnered with the Fairfax County Department of Public Safety Communications (DPSC), the public safety communications hub for fire, police, and medical public safety agencies in Fairfax County, Virginia. Fairfax County is a large suburban-urban county in Northern Virginia with a population of more than 1 million. The Fairfax County DPSC is a major operational call center—one of the 10 largest in the United States—and calltakers receive all public safety calls from Fairfax County—more than 1 million calls per year. These calls come to the DPSC's attention not only through 911 lines but also from *all* emergency and nonemergency telephone numbers in the county, including any public safety-related phone line. If police officers need to be dispatched, calltakers then transfer calls to police dispatchers within the same call center.

Over the course of three months, the research team conducted almost 130 hours of systematic observation of both calltakers and dispatchers in two-hour data collection periods. These observations were spread out across all seven days of the week and between 7 a.m. and 9 p.m. During each two-hour observation period, every call that a calltaker received or call that a dispatcher assigned to an officer was listened to and recorded, along with the decisions of calltakers and dispatchers. In total, 511 calls received by calltakers and 597 calls dispatched to patrol officers were systematically observed and recorded using structured instruments. Each calltaker and dispatcher was also interviewed about their work.

Calltakers as Gatekeepers to Public Safety Resources

The public safety communications professionals at the DPSC in Fairfax County handle a large range of *both* emergency and nonemergency calls for service. Indeed, about 50 percent of calls that calltakers manage come in through nonemergency lines. While the vast majority of these emergency and nonemergency calls are not life-threatening events, it is clear from the range of calls that the public's expectations for public safety services are very high. In Fairfax County, almost 70 percent of calls are traffic related (20 percent), administrative or information seeking (13.5 percent), requests for nonemergency service and follow-ups (12 percent), (mostly false) alarm calls (11 percent), and calls in which the caller mistakenly dialed 911 or hung up (12 percent). Another 9 percent are medical or mental health-related calls, 8 percent could best be described as disorders, and the rest are a mix of property, violent, and domestic-related crimes and concerns, or calls about suspicious people, missing persons, or vice-related activity.

Call and dispatch main floor of the Fairfax County Department of Public Safety Communications (photo courtesy of same)

From our observations, we discovered that calltakers are the gatekeepers to public safety resources. Specifically, they resolved about *half* of the observed calls that came into the call center without forwarding the call to a dispatcher, potentially presenting substantial public safety resource savings. They are the first point of contact between the criminal justice system and citizens, and with their discretion and problem-solving capabilities, they can divert public demands for police resources. In Fairfax County, callers can still demand (and will receive) a police response even if one is not needed, and there are some calls that calltakers are much less likely to resolve on their own (e.g., mental and medical calls, domestic-related events, serious violence, and property crimes, and calls about suspicious people and events). However, this finding provocatively illustrates the essential role that calltakers play in patrol deployment and resource allocation and savings.

Some have argued that, because of their substantial interactions with the public, 911 operators are part of the justice system's legitimacy equation, given their potential to exhibit procedural justice during their exchanges with citizens (see Quattlebaum, Meares, and Tyler, 2018; Flippin, Reisig, and Trinkner, 2019). These hypotheses need much more testing to determine their salience. Calltakers initially have a very structured approach to talking to citizens, focusing on first identifying the location of the caller and the problem as well as the nature of the issue. But we also discovered that calltakers can spend, on average, two to five minutes talking to callers before ending the call or sending the call to a dispatcher. During these observations, we saw a procedural justice being exhibited by many calltakers, although there are variations in styles across calltakers.

More generally, our observations suggest calltakers may be able to contribute to holistic and strategic thinking about operational deployment, and in some instances already have. Public safety communications groups have already tried to manage the large volume of false alarm calls through various techniques, and some agencies have created policies in which they will not dispatch officers to minor traffic accidents, even if a caller demands it (unless very specific thresholds are met). At the same time, it may be difficult for calltakers to manage certain calls or divert them from police response. Not only are nonemergency lines (like "3-1-1") still routed through public safety communications departments, but we found that a significant portion of nonemergency line calls (about 32 percent) still require a police officer to be dispatched. Further, some calls cannot be easily resolved by calltakers. Some have suggested, for example, that mental health specialists might work with calltakers to mitigate police officer response to mental health calls. But it was clear from our observations that rarely are these calls able to be easily resolved on the phone.

Further, while such diversion and management strategies may preserve law enforcement deployment resources, they may add to the needs and demands of public safety communications departments. Like officers, calltakers may need more training and specialized skills if they are expected to contribute to the strategic diversion of public safety resources. Our sense, given our observations, is that calltakers are more than capable of accomplishing these tasks, but this would require new training, resources, compensation, and authority in these roles.

Dispatchers as Guardians and Resource Managers

It was much more challenging to observe dispatchers compared to calltakers, as they handle multiple calls simultaneously using multiple computer screens and interfaces. In our observations of the dispatching of almost 600 calls to police officers, we discovered that dispatchers play an essential role in managing patrol deployment. Dispatchers have much less discretion to resolve calls and primarily serve to manage the allocation, timing, and accountability of triaged calls to officers. They also manage "officer-initiated calls," when individual officers call them when they are proactively engaging in something, as well as call-outs from officers who are handling administrative matters. Dispatchers oversee multiple calls and officers at the same time and thus have a holistic awareness of the field of patrol deployment. Dispatchers know who is assigned and where, the prioritization of events, how many officers are present at any given

situation, and how long officers are spending on particular events. Through their oversight, decision making, and management of both citizen calls for service as well as officer self-initiated activities, dispatchers supervise and manage the personnel resources expended in patrol.

Given their roles, dispatchers serve as guardians of both officer and public safety. They help to manage officer risk by providing important information to officers en route to a scene, ensuring that back-up officers respond, and keeping track of where officers are and what they are doing. They can pull officers away from calls and toward other events based on the nature of those events. Interestingly, dispatchers also serve as managers of patrol officers. First-line patrol supervisors might oversee the deployment of their squads, the substantive approaches to officer call response, or what officers are doing when not answering calls. These decisions depend on the movement and timing of officer work, which dispatchers manage. Thus, we hypothesize that dispatchers could play an important role in strategic crime prevention because of this management role. Additionally, dispatchers and patrol officers both have a good knowledge of the history of particular places where crime concentrates. Combined with analysis of CAD and records management data, environmental information, and situational factors, such knowledge can potentially be a powerful tool in problem-solving to prevent future crime at those places. However, such an approach to strategic and holistic patrol deployment would require collaboration between public safety communications departments and police agencies to carry out successfully. From our observations more generally, this would be a somewhat unusual idea in many jurisdictions.

Implications for Public Safety Work

How patrol officers spend their day (and the outcomes of that time spent) is the direct result of not only the occurrence of crimes and disorders, but a combination of those concerns, citizen expectations, and call patterns of the public; the actions taken by calltakers and dispatchers; how officers respond to these calls; and what officers are doing when they are not responding to calls for service. All of these elements go into the equation of public safety resource expenditure, effectiveness, and the legitimacy of the system.

Taking such a holistic perspective makes us rethink quick solutions to public safety resource management. For example, recent discussions about whether some calls that come into 911 call centers can be diverted away from police response to save officer time should carefully consider all ramifications when doing so. First, we know that calltakers already divert and resolve a great number of these calls (although the overall effect of this activity remains unknown). While not responding to minor calls for service might indeed "reduce the footprint" of the criminal justice system in people's lives, it could also erode citizen perceptions of the police, given that people most often call the police for these minor issues and often expect a response when they call. Additionally, if calltakers are expected to effectively divert or resolve certain types of calls, help people who are in mental distress, or exhibit advanced

forms of procedural justice as some have suggested, then they should be adequately trained and compensated for doing so, and those strategies should be tested for effectiveness.

We now know from a great deal of research that officers can prevent calls for service from happening in the first place through proactive strategies, problem-solving, and effective resolution of calls that do occur. Call occurrence (and therefore time spent on calls) is dependent on how officers spend their noncommitted time problem-solving the underlying issues that will inevitably create future calls. Reducing the criminal justice footprint in the long run, therefore, is achieved not only through diversion but also through the prevention of calls in the first place. Of course, how officers carry out their proactive activities also matter to their effectiveness and legitimacy.

Can calltakers or dispatchers assist in strategically dealing with certain types of issues, either reactively or proactively, to improve these public safety outcomes? Is a more coordinated strategy of deployment possible that links calltakers, dispatchers, patrol officers, and supervisors? Such questions require a more holistic, evidence-based, and outcome-oriented perspective to this operational area. We hope our exploratory research sparks these discussions.

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Developing Methodology for Finding Ghosted Police Vehicle Pursuits

BY MICHAEL PFEIFFER AND GEOFFREY ALPERT

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Pursuit driving remains one of the most controversial and dangerous police activities. It is an adrenalin-driven, physical activity that can stimulate risk-taking while meeting the natural desire for police officers to catch fleeing suspects. It is difficult for an officer to sit idly by when any suspect attempts to avoid apprehension.

Since suspects started running from the police, officers have been chasing after them. One of the earliest legal cases analyzing a vehicle pursuit is from the 1940s, *Chambers et al. vs. Ideal Pure Milk Company et al.* and *Chambers et al. v. Elmore et al., 245 S.W. 2nd 589 (1952)*. In 1941, Milton Elmore was driving a horse-drawn milk wagon in Owensboro, Kentucky. Moments earlier, police officers Robert Chambers and Jack Long observed a parked car on a cross street, occupied by Wren Shearer, a person whose "bad reputation had become known to them" (*Chambers et al.*). Shearer sped off to avoid investigation by the police and, while fleeing at approximately 75 miles per hour, struck Elmore, seriously injuring him. Both Elmore and the Ideal Pure Milk Company sued Officers Chambers and Long, and at a trial in October 1949, the jury rendered a verdict in favor of Elmore and the milk company. The officers challenged the verdict and, on appeal to the Kentucky Supreme Court, the trial court's decision was reversed. The court noted:

> Charged as they were with the obligation to enforce the law, the traffic laws included, they would have been derelict in their duty had they not pursued him. The police were performing their duty when Shearer, in gross violation of his duty to obey the speed laws, crashed into the milk wagon. To argue that the officers' pursuit caused Shearer to speed may be factually true but it does not follow that the officers are liable at law for the results of Shearer's negligent speed. Police cannot be made insurers of the conduct of the culprits they chase. It is our conclusion that the action of the police was not the legal or proximate cause of the accident, and that the jury should have been instructed to find for the appellants. (*Chambers et al.,* pp. 590–591).

The *Chambers* decision specified that the actions of the officers caused the offender to flee. However, it also noted that the officers should not be held legally responsible for the fleeing suspect's actions or the resulting injuries to an innocent bystander. During the 1950s through the 1970s, this thinking permitted the police to adopt an attitude of "chase until the wheels come off," often resulting in people regularly getting injured and killed from those pursuits. Regardless, the balancing test from *Chambers et al.* remained. Officers were expected to weigh the need to immediately apprehend a fleeing suspect based on available information against the inherent safety risks to the public. Although these views may be perceived as conflicting, officers continued to pursue suspects for the "greater good" of enforcing the law and apprehending suspects.

There continued to be no real policy reforms to pursuit driving until the police and research community started collecting data on police vehicle pursuits and their consequences in the 1980s (Alpert, 1988). Research began to show that police pursuits were often the result of minor traffic, property, or misdemeanor offenses, but often resulted in serious consequences and harm to officers and citizens alike. In fact, the courts were deciding cases that went against the police (Alpert and Lum, 2014). Many agencies began reviewing their vehicle pursuit policies and elected to restrict pursuits to only those fleeing for violent crimes (Alpert, 1997; Reaves, 2017). As a consequence, agencies with more restrictive policies began experiencing reductions (sometimes 80 to 90 percent) in the number of reported vehicle pursuits, related injuries, and financial judgments (Alpert, 1997).

Because new restrictive policies were difficult to enforce, one unintended consequence of these policy changes included a lack of reporting or recording pursuits unless there was a collision or other reason that required reporting. While some internal auditing was conducted, it included only a review of radio transmissions or citizen complaints. Known as "ghosted pursuits," this practice of pursuing fleeing

vehicles without reporting the pursuit has been difficult to quantify, track, and correct or discipline.

Today, while pursuits continue to remain a highly liable and controversial police tactic, new technology and data collection approaches have provided the police with greater potential to more thoroughly track pursuit practices, and especially ghosted pursuits. For example, many agencies have vehicles equipped with Automatic Vehicle Locators (AVL), which can track speed, acceleration, braking, and other information about vehicle use. Many police cars have in-car camera (ICC) systems that are activated by the use of the vehicle's emergency equipment. Officers also have body-worn cameras (BWC) that may be linked to ICCs or that must be activated when the officer is engaged in an enforcement activity (like a pursuit). This technology can be used to increase officer and community safety as well as get a better handle on ghosted pursuits.

Ghost Busters

Research findings make clear the consequences of police pursuits, and that the potential costs of pursuits may outweigh their intended benefits. However, knowing that ghosted pursuits may persist, agencies must develop better ways to discover and correct for ghosted pursuits given their potential costs. While available technologies like those described above may differ by agency, the New Orleans Police Department (NOPD) has adopted a process that can be used and modified by other agencies to help control this problem.

After concerns arose, NOPD started investigating the likelihood of ghosted pursuits. Data from the NOPD show that officers who engage in ghost pursuits are more likely to be in a proactive unit or to be principally engaged in proactive activity. For example, such pursuits would likely start as a self-initiated traffic stop or when a suspicious vehicle is observed, and there is an investigatory stop. For officer safety and as part of training, most agencies and officers follow the practice to radio in to dispatch the vehicle description, stop, and location. In agencies with ICCs and BWCs, officers may be required to activate those cameras as they approach the vehicle. Most vehicle stops proceed routinely but, in rare cases, the driver of the suspect vehicle may speed off and the officer has to make the decision to pursue or not to pursue the vehicle. In most agencies, it is likely the case that a traffic stop where a suspect refused to stop and the officer did not pursue would require no paperwork or follow-up. However, the officer may decide to engage in a pursuit. If the officer knows this action does not meet the threshold for a justified vehicle pursuit under agency policy, but still engages and does not report the pursuit, this becomes a ghosted pursuit. In ghosted pursuits, officers often still use their overhead lights and siren, which will keep the ICC (and possibly BWC) recording. If they decide to turn the lights and siren off to deactivate the recording of the pursuit, a post-event video buffer will generally provide at least 30 seconds of ICC video to review. A pursuit without emergency lights and sirens is called a "de-facto pursuit,"

as it has all the behavioral aspects of a pursuit but none of the protections. Depending on its programming, the ICC may engage or stay engaged due to severe driving behavior such as heavy breaking or acceleration. If the suspect vehicle eludes the officer or the officer decides to cease pursuing the vehicle, officers of ghosted pursuits only report the activity they had originally called in without reference to the pursuit, thereby avoiding supervisory review.

Given the nature of ghosted pursuits, ICCs and BWCs may not be the best approach to determining whether a ghosted pursuit is occurring. Instead, computer-aided dispatch (CAD) data may be another useful data-driven approach to discover ghosted pursuits. For example, analysts might look at all self-initiated vehicle stops or traffic stops that were closed by the officer but in which no action was taken. Such an analysis might provide a starting point for identifying ghosted pursuits and correcting for them. The NOPD followed this approach in 2018 and discovered 245 CAD event records that satisfied these criteria. To reduce the number to events most likely to be "issues," the data were further restricted to events where the time from creation of the item/event (i.e., when the officer called in) to the disposition (closing the event by a mark-up) was greater than 1 minute.

This modification reduced the number of events from 245 to 98. The 98 events were then reviewed by two independent observers for

1. the length of time the item was open,

2. the nature of the unit making the stop (proactive units versus regular district patrol),

3. the number of units listed as participating in the event, and

4. the event narrative, based on communications between the dispatcher and the officer, which provides clues as to what occurred.

After a review of the 98 events, one observer identified 33 events that might indicate a ghosted pursuit, while the other identified 24. There was 84 percent inter-rater agreement, which warranted in-depth investigations. The next step was to review all available video (ICC and BWC) and other documentation on the overlapping 24 events selected by both raters to determine if there were actual unreported or ghosted vehicle pursuits.

Each of the 24 events was examined to determine the day and shift of the event, the vehicle and officer involved, and any noted ICC and BWC entries. All recorded video was watched and all files were reviewed. From this analysis, 15 possible vehicle pursuits were identified as possible ghosted pursuits from the 24 initially identified. None of the possible vehicle pursuits was found in the existing pursuit report database to which officers were required to report. Second, all 24 of the possible or likely ghosted vehicle pursuits were also sent to the Public Integrity Bureau (PIB) for review and determination of formal disciplinary or corrective action.

This accountability process has been institutionalized at NOPD, and there is now a review of each possible ghosted pursuit using the same investigative parameters every month. An additional accountability measure was instituted by creating a new CAD code for officers to use when officers decided not to pursue a fleeing vehicle ("Signal 10-28NP"). This allows officers to indicate that they are following agency policy when a vehicle flees but when the officer knows they would not be able to engage in an authorized vehicle pursuit. While creating the new code has become an important step in capturing the baseline number of fleeing vehicles and an officer's decision-making process, these cases are still being reviewed as possible ghosted pursuits should they fit the inclusion criteria during the monthly review.

The review process for ghosted vehicle pursuits began in April 2018 and found that, of the 24 events submitted to PIB as possible ghosted pursuits, 16 were deemed to require formal "administrative investigation of possible violations of departmental rules relating to vehicle pursuits." Since March 2019, there has not been a single documented instance of a ghosted vehicle pursuit requiring disciplinary investigation or action.

The NOPD procedure is an important example of evidence-based policing. Research may discover trends in practices like pursuits and analyze negative consequences or violations. But evidence-based approaches also require agencies to find ways to implement strategies to strengthen the adherence to evidence-based policies and practices, ultimately to increase both officer and citizen safety and security.

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"Mobile" or "Assigned"? Pros and Cons of Two Different Models of Deploying SROs

BY JOHN ROSIAK

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Clearly, the field of criminology needs more and better data on the effectiveness and impact of school-based law enforcement. As a recent Congressional Research Service report stated, "There is a limited body of research available regarding the effect School Resource Officers (SROs) have on the school setting."[1]

If schools choose to use SROs, one of the practical areas where we need to learn more is regarding how law enforcement agencies should deploy officers in schools. There are different ways law enforcement agencies can deploy officers to work in schools. This article explores some of the current practices, contrasting the "mobile" (or "roving") model with the model of assigning an officer to a particular school or schools. A better understanding of these models of implementation will provide clearer direction for research that can yield results to better guide the field.

Little research exists on the relative merits of the mobile versus assigned models of deploying officers in schools. To help us better determine the best way for a community to deploy its SROs, we turn to the wisdom from years of experience held by practitioners in the field. Their insights were stimulated by a project that examined the pros and cons of how a large urban community distributed its officers in schools. Such insights can inform school-law enforcement partnerships considering or reconsidering their deployment of SROs, and can also help guide needed research comparing the various models.

Mobile SRO Model

The mobile model of deploying SROs, sometimes referred to as the roving or "roaming" model, describes the case where SROs cover a wide range of schools, either within a sector of a large city or all the schools in a jurisdiction. Officers are not appointed to work in any particular school; rather, they are asked to cover all, or most, of the schools in an area—typically by responding to calls for service from those schools. At times, the mobile model is used as a temporary measure while departments figure out how to staff positions in particular schools. It is also used by SRO supervisors who travel between different schools in support of their SROs and school administrators.

There are multiple benefits to a mobile model of SROs, a major one being coverage. "Mobile deployment allows us to cover a larger area with fewer personnel," according to Kevin Bethel, former deputy police commissioner of Philadelphia, Pennsylvania, explaining how the city and its

John Rosiak

police department cover all of the schools in the city. Philadelphia uses a hybrid model, where police officers typically work outside the school in support of the safety officers inside the school. The greater coverage per officer brings down the cost per school. Additionally, by visiting more schools, officers also develop a broader knowledge of school safety and the physical aspects of schools, and get to know more students and school staff.[2]

Mobile SROs see more problems (and possibly more solutions) throughout the broader community and can help by sharing what they see with other schools. For example, an SRO can make a principal aware of how another school uses its electronic tardy system more effectively.

Mobile SROs also help to establish school-neighborhood connections. One mobile model practice (though not unique) is to have officers patrol the neighborhoods surrounding the school offering "portal (school) to portal (home)" surveillance. It is not uncommon for mobile SROs to move from a school they cover to the major transportation hub near the school. This route is patrolled because it can be a "hot spot" for fights or an area where gang activity occurs.

Another possible benefit is unpredictability, noted by Ben Fisher of the University of Louisville. Fisher argues that the element of unpredictability can be an asset in law enforcement. Mobile SRO patrols may be in a better position to intervene in negative behavior if those engaged in such behavior are not expecting the officers.

Finally, the mobile model could help to avoid some confusion about reporting relationships, meaning "there is less of a tendency for the SRO to think he/she works for the principal when they, in fact, work for the police department," according to Sgt. Delmar Williams, an SRO supervisor in the Milwaukee, Wisconsin, Police Department.

One argument against the mobile SRO model is that SROs are spread too thin. Precisely because they have such a wide coverage area, SROs do not have a chance to build strong and meaningful relationships with school staff and students. As Deputy Superintendent Leonard DiPietro of the Cambridge, Massachusetts, Police Department puts it, "It is difficult to work with 'whomever' shows up." Relatedly, this may impact trust-building. Commenting on his district's experiment with a mobile model rotating through all schools, SRO Todd Runyan of the Sioux Falls, South Dakota, Police Department notes, "The thought process was that the mobile model would allow us to get to follow more of our students as they progressed through the grades. What we found, though, was that when the mobile officers were in a school that was not their

assigned school, we had very few people come to us with problems. Generally, what would happen is that a student or teacher would stop by the office, see that their 'regular SRO' wasn't there, and say something to the effect of 'I'll wait until our normal officer is here.' We found [the mobile approach] very difficult to try to make the kinds of relationships that are instrumental to our job."

A mobile model may also lead to shallow understanding about the problems at any given school. "Roaming SROs may not get the sense of community that you need to understand the students and staffing, as well as the aspects of the school building," according to Sgt. Jessica Murphy, the SRO supervisor and academy instructor in Wicomico County, Maryland. This situation may also mean that SROs have less time to be proactive. Using the mobile model, SROs are more reactive than proactive, given the number of schools they have to cover. Further, this type of SRO deployment may reduce the accountability of SROs given that school administrators do not know or see officers regularly.

Assigned SRO Model

This model is where SROs are assigned to cover a particular school, or schools, on a regular basis. The SRO usually goes to that school daily, typically having a designated office. The SRO may conduct patrols in the school, work with school administrators, serve as a mentor or informal counselor to students, and sometimes even teach students.

Such a model may allow SROs to "build up deeper, first-hand knowledge of the school community," according to Fisher. The assigned SROs also can "get to know the campus layout, the high-risk areas, etc. They get to know the students and parents," says Curt Lavarello, the executive director of the School Safety Advocacy Council and the former executive director and founder of the National Association of School Resource Officers.

In turn, an assigned model can build stronger relationships. "The best benefit of the assigned model is long-term relationships," says Peter Pochowski, founder of Milwaukee's SRO program. The assigned model affords officers the ability to spend a greater amount of time on school grounds "to develop relationships with the students and a deeper connection to the school and staff," notes Joseph McKenna, director of safety and security for the Comal Independent School District in Texas, who has studied SROs extensively. "Having a resident SRO is by far better for de-escalation tactics and rapport building," states Murphy. "One of the true benefits to the [assigned] School Resource Officer Program is the fact that it allows that SRO to foster relationships with young people and school staff. Those relationships form the foundation for a true SRO program…[Students] also see that the SRO is 'part' of their school, sharing in the school pride to make sure it's safe," adds Lavarello.

Assigned models can also facilitate more trust and consistency between SROs and students. "Familiarity with officers who are readily visible and approachable can result in developing the deeper levels of trust, which lead people to do things like report suspicious activity. The officer gets to build relationships with the students, much like a beat officer, resulting in a safer campus," according to Clarence E. Cox, retired chief of the Clayton County, Georgia, School District Police Department. "The assigned model provides consistency, so the SRO is more apt to become a part of

that particular school's community. As such, they may develop more trust, intelligence, and relationships with the students," states DiPietro. He adds, "[F]or consistency, stay with the same officer assigned. The schools then know 'who' their SRO is and how each officer works with each school."

Assigned models may also afford more opportunities for proactive efforts. Assigned officers can engage in more education efforts with students, staff, and community members. SROs might teach a curriculum; give ad hoc presentations on social media, bullying, or a myriad of other topics; or inform staff and parents about a variety of safety issues confronting that community.

Assigned models, however, come with their challenges. A major one is cost. The expense of having assigned SROs can be very high, even when that cost is shared between the school district and law enforcement agency.

Assigned SROs can also be misused by school staff: There are stories of administrators or staff who ask SROs to inappropriately help to enforce school rules (e.g., "Make that boy take off that hat" or "Give that student a ticket for cursing."). At times administrators who may be trying to make the case for removing a student from school may even ask the SRO to give a citation, or arrest a student for breaking a school rule. Enforcing school discipline rules is the responsibility of administrators, not SROs.

Occasionally, critics of the assigned model will argue that assigned officers might not be able to exercise the authority of a police officer if or when that is needed, because the officer has become "too close" with students. Other law enforcement officers and school staff members disagree with that argument, saying that seeing an officer as human does not distract a mature officer from still being able to do his or her job.

Law enforcement agencies and school systems must figure out how to make their school-based law enforcement arrangement work best for them, given the resources available to their communities. As communities determine how they will respond to the call to "coproduce" school safety, school-law enforcement partnerships will have to weigh the advantages and disadvantages of different models. When it comes to the question of how to deploy SROs to schools, it appears that, from weighing the pros and cons according to current practitioners reviewing the mobile versus assigned model, the optimal arrangement would be where officers are assigned to particular schools. However, evaluation research on this issue could clarify these issues, provide context to costs incurred, and help communities decide with greater confidence the best way to deploy officers in schools.

[1]   School Resource Officers: Issues for Congress. Retrieved from https://www.everycrsreport.com/files/20180705_R45251_db5492370a04c7e3b39f27ce52416d229a0ac17d.pdf

[2]   This observation comes from a February 2018 discussion at the U.S. Community Oriented Policing Services (COPS) Office. See also https://cops.usdoj.gov/supportingsafeschools.

Congratulations to Our Graduates!

The Center for Evidence-Based Crime Policy (CEBCP), housed in the Department of Criminology, Law and Society at George Mason University, serves to provide graduate research assistantships and advanced training in evidence-based crime policy to the next generation of criminologists. This past academic year, three CEBCP research assistants received their doctorates. Congratulations to Sangjun Park, J. Amber Scherer, and Xiaoyun Wu!

SANGJUN PARK

Sangjun is currently an assistant professor of criminal justice at Southern Utah University. His dissertation, "Examining the 'Law of Crime Concentrations' across Multiple Jurisdictions," examined the salience of Weisburd's law of crime concentration across 42 police jurisdictions in England and Wales. His analysis generally confirms that crime concentrates in a small proportion of street segments across all jurisdictions of a country, but also finds that the level of crime concentration can vary across different types of places and crime types, potentially challenging the law. This study expands the debate about the law of crime concentrations and suggests that the law may be best conceptualized as an equation explained by the varied nature of human activity.

"It was a great choice to join the Criminology, Law and Society Program at George Mason University. I received top-notch training in scientific research methods, participated in exciting research projects, and interacted with brilliant professors. I especially appreciate my professors who seamlessly supported expanding my knowledge. With this knowledge, I was able to successfully find an academic job and teach what I have learned from Mason. I often share my academic experience with my own students and highly recommend Mason's graduate programs for their future academic success."

The CEBCP is seeking top doctoral students to join our team (see cebcp.org/team). Applications for the PhD in Criminology, Law and Society Program are due December 1. For more information, visit cls.gmu.edu/programs/la-phd-cls.

J. AMBER SCHERER

Amber is currently a program coordinator for the Washington/Baltimore High-Intensity Drug Trafficking Area (HIDTA) Program and is detailed to the Office of National Drug Control Policy. Her dissertation, "Identifying Effective Strategies for Robbery Investigations: An Examination of Organizational, Procedural, and Individual Characteristics," surveys a national sample of more than 700 law enforcement agencies, clustered by their 30-year robbery clearance rate patterns, regarding their techniques for investigating robberies. Agencies with long-term high, low, and average clearance rate trajectories are examined to see whether any organizational-, procedural-, and investigator-specific characteristics can predict their long-term clearance rate patterns.
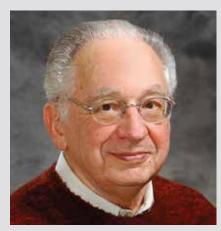
"As I look back, there are countless reasons why this was the perfect program for me. Not only did I receive a stellar education in multiple facets of the criminal justice system, I also made lasting relationships with the faculty, staff, and fellow students. What I learned goes far beyond the classroom, and I will utilize those lessons throughout my career. Working in the Center for Evidence-Based Crime Policy gave me opportunities to expand my research interests, develop leadership skills, and feel like part of a supportive team. Having world-renowned professors is important, but perhaps more crucial is finding and working with the correct mentor. I cannot say enough about mine, Dr. Cynthia Lum. Professor Lum takes pride in her students by personally investing in their success and making them see their own individual potential."

XIAOYUN WU

Xiaoyun is currently a research associate and postdoctoral fellow at CEBCP and serves as managing editor of *Criminology & Public Policy*. Her dissertation, "Understanding Everyday Police Proactivity and its Relationship with Crime," examines daily patterns of police proactivity and how those patterns respond to changes in crime at micro-geographic-temporal levels. Using calls for service and police location data generated by automated vehicle locator devices, she also evaluates how changes in proactive patrol then affect crime at those places, and more specifically, how the deterrent effect of proactivity is conditioned by the characteristics and the measurement of proactive patrol activities.

"I received both my master's and PhD from the Department of Criminology, Law and Society at George Mason University. My time at Mason has been a constant learning and growing experience that has shaped my academic interests and my approach to research. I took classes from top-notch scholars who are knowledgeable and passionate about their areas of interest, and I worked and continue to work with wonderful people who showed me the way to conduct empirical and cutting-edge research with high methodological rigor. The department has a collaborative atmosphere and the professors try to ensure that we have the resources and connections to succeed and thrive. Mason has been a wonderful starting point for my research career, and I highly recommend the criminology program to prospective students who are hoping to impact the field."

Herman Goldstein (1931–2020)

BY JOHN E. ECK AND MICHAEL S. SCOTT

John E. Eck *is a professor of criminal justice at the University of Cincinnati. He met Herman Goldstein in the late 1970s and he helped implement many of Goldstein's ideas.*

Michael Scott *is a clinical professor of criminology and criminal justice at Arizona State University and the director of the Center for Problem-Oriented Policing. He met Goldstein as an undergraduate student at the University of Wisconsin–Madison.*

Police officers today live in the age of Herman Goldstein. Goldstein ranks with Sir Robert Peel in his influence on policing in western democracies. Before Peel invented the modern police force, private thief catchers detected offenders, the military controlled crowds, and people were left to police one another. After Peel, uniformed police patrols superseded private investigations and replaced military interventions. Peel envisioned the police as a preventive force that measured success by the absence of crime and disorder. Over time, police lost sight of Peel's emphasis on this policing goal as their leaders tallied arrests, tickets, and other easily countable activities.

Goldstein's genius was to combine Peel's focus on prevention with a deeper understanding of all that we want police to accomplish. After first clarifying the multiple objectives of police, he urged police to understand their core mission as helping to solve problems the public brings to their attention. This seemingly simple notion is packed with profound insight and complexity. Importantly, it demands that police understand law enforcement as a means, not as an end. Police don't exist to enforce the law. They exist to promote safety, security, peace, and liberty, with law enforcement being but one tool available to police toward those goals.

We readers of *Translational Criminology* are Goldsteinians, whether or not we acknowledge it. Nearly all modern policing practices we embrace are rooted in Goldstein's ideas. Evidence-based policing is a prime example. Before Goldstein, almost all police policy discussions revolved around the means of policing. These discussions ranged from the important to the silly: from how should police enforce laws to whether they must wear their hats in public.

Goldstein was among the first to urge that policing practices be tested for their effectiveness. He also demanded that those goals be weighed against other legitimate goals, such as protecting freedom, promoting equality, and reducing social costs. The Goldsteinian revolution prompts relentless attention to getting the ends right and to matching the appropriate means to those ends. But without clarifying what ends are being sought, the production of evidence for "what works" is irrelevant. Goldstein recognized, in ways that Peel did not, the amazing range of problems with which the police deal, the complexity of addressing them fairly and effectively, and the vanity of simple solutions.

Now we are aware of the value of systematic reviews for policing. Does focused deterrence reduce gang violence? Do body-worn cameras reduce police use of force? Does patrolling hot spots curtail drug dealing? Once the police ask these sorts of questions, evidence quantity, quality, and consistency become all the more critical. Before the Goldsteinian revolution, the market for evidence of effectiveness was small, and the market for evidence quality was smaller. Now the demand for quality evidence is much greater and more complex. Pioneers of evidence-based policing explicitly developed the evidence-based movement to enhance Goldstein's policing framework.

Goldstein's observations sparked the most ambitious and detailed application of what we now call translational criminology. Beginning in 2000, the Center for Problem-Oriented Policing developed scores of guides for police on numerous problems. These guides synthesized research and practice to encourage the nuanced application of that knowledge to local variants of problems.

We are now accustomed to seeking opportunities for police and academics to collaborate on useful projects. Before Goldstein, this was rare. He sought to align policing with democratic values and with the reality of the world the police encountered. Goldstein's problem-oriented policing pointed police and academics to numerous topics for which their research skills could be usefully applied.

We mourn the death of Herman Goldstein. He had deep empathy for police. He was always careful to understand the many conflicting pressures on street cops, their supervisors, and their leaders. Like a good parent, he could be highly critical of police while at the same time being encouraging and nurturing of their best work. His desire for police to be more than they themselves thought possible drove his development of problem-oriented policing. He set a higher bar for policing, and many police officers and agencies rose to that challenge. He drew to him a worldwide cadre of police and researchers who embraced his ideas, filled in the details, expanded upon his central idea, and molded these ideas into practice.

Herman Goldstein succeeded at improving the police beyond anything anyone might have expected when he first set out to do so. There remains a long way to go in shifting policing to Goldstein's ideals, but we have made a strong start. So, while we mourn his passing, we can take great joy in the fact that Herman Goldstein's ideas are as vibrant and relevant today as when he first articulated them.

Professor Herman Goldstein was a recipient of the CEBCP's Distinguished Achievement Award in Evidence-Based Crime Policy. Read his 2015 acceptance speech at bit.ly/Goldstein2015.

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