



RESEARCH IN BRIEF

In-depth Training of Police Officers Results in Less Crime, Fewer Arrests, and Improved Community Views Towards Police in Crime Hot Spots

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What difference does it make if police officers are trained to consistently treat everyone in fair and respectful ways—to remain neutral, for example, be active listeners, and exhibit trustworthy behavior? **Can training change the behaviors¹ of police officers?** If it can, will officers rely on and consistently use the new behaviors in high crime neighborhoods? If they do, will this focus on fair interactions **(1)** reduce crime or **(2)** have a positive influence on citizen evaluations of the police?²

Three police departments and **28** police officers in **120** crime hot spots participated in an experiment to explore these questions.

1 In this context, the term “behavior” is used to describe the manner in which officers act in the performance of their duties. It is not intended to imply that the actions are consistent or inconsistent with any norm, rule or policy.
2 In this study, “citizen” is a generic term for a member of the public and is not intended to make any claim about an individual’s citizenship status.

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The results indicate that officers did change their behaviors in ways consistent with the training, they applied lessons of the training in crime hot spots, crime went down, and after the study, community members perceived officers on the block as less likely to harass and mistreat people.

The intervention lasted nine months and involved two matched groups of officers who were randomly assigned to either the Procedural Justice Condition (PJ) or the Standard Condition (SC). The PJ group of officers received 40 hours of special, intensive training in the principles of procedural justice and were taught to apply the principles in their everyday work and encounters. (See **“What Is Procedural Justice?”**) The SC group received no similar procedural justice training and did their work as usual following standard procedures. Hot spots of crime also were identified and randomly assigned to the two groups. Data was collected to compare arrests and crime in the two groups of hot spots, officer behaviors in the hot spots, and to measure perceptions of residents within those areas.

Analysis of data from the experiment showed that communities gain tremendous benefit from investing in police training in procedural justice. Crime went down and residents said that officers on their block were less likely to “harass or mistreat people” or “use more force than they need to.” Arrests also went down among the PJ group of officers. Though the study period was limited to 9 months, the study’s methods and analysis were rigorous and the findings were significant and clear across the sites.

This is the first study to produce empirical data about the outcome from training officers to apply the principles of procedural justice in a city’s hot spots of crime. The study was funded by Arnold Ventures and the National Policing Institute.

What Is Procedural Justice?

Procedural justice speaks to people’s perceptions of the fairness of the process, not necessarily the outcome of the process. It is well documented that perceptions of fairness are strongly influenced by the quality of the experience, not just the end result. For example, a driver’s perception about being stopped by the police depends less on the outcome—whether he got a ticket—and more on whether he felt treated in a fair way.¹

The theory of procedural justice has been applied in various settings, including in supervisor-employee relations in organizations, educational settings, and court proceedings.² When fully embraced, the theory holds that it can promote positive organizational change and bolster relationships.³

The cornerstone of procedural justice theory is a consistent process applied equally to everyone. The theory rests on four pillars:

- *Treat everyone with dignity and respect*
- *Be as neutral and unbiased as possible*
- *Give people a voice by listening to their side of the story*
- *Convey a sense that decisions are based on trustworthy motives*

In criminal justice settings, procedural justice holds that officers can build trust and improve citizen perceptions of police legitimacy when they practice procedural justice in their everyday interactions with citizens. Some scholars and commentators contend that procedural justice can reduce crime because it increases people’s respect for the law and willingness to cooperate with the police. Others argue that its “soft” version of policing will reduce police deterrence; police won’t be able to control crime.⁴ There has been little empirical evidence to prove either point...until now. In the “Hot Spots Policing and Procedural Justice” study officers who were trained to understand the concepts of procedural justice were more likely to exhibit behavior in line with the principles of procedural justice.⁵ The evidence shows that police can be trained to behave in ways that both keep crime down and leave citizens with more positive feelings about police behavior.

1 T. R. Tyler, *Why People Obey the Law*, (Prince University Press, 2006).

2 See <https://law.yale.edu/justice-collaboratory/procedural-justice>

3 Tom R. Tyler and Jeffrey Fagan, “Legitimacy and Cooperation: Why Do People Help Police Fight Crime in Their Communities?” *Ohio State Journal of Criminal Law* 6, no. 1 (Fall 2008): 231–275, http://moritzlaw.osu.edu/osjcl/Articles/Volume6_1/Tyler-Fagan-PDF.pdf.

4 T. Tyler, Enhancing police legitimacy, *Annals of the American Academy of Political and Social Science*. 593, 84-99 (2004); H. Mac Donald, How to increase the crime rate nationwide, *Wall Street Journal*, June 11 (2013); H. Mac Donald, Breakdown: The unwinding of law and order in our cities has happened with stunning speed, *City Journal*, July 1 (2020).

5 All four of the principles were measured individually as well as collectively. Three of the four principles as well as the collective, overall measurement were statistically significant. The individual measurement for “trustworthy motives” did not rise to the level of statistical significance, but the coefficient was in the right direction.

The Experiment and the Results

THE EXPERIMENT WAS DESIGNED TO ANSWER FOUR MAIN QUESTIONS:

- 01 *Does training lead to more procedurally just policing? That is: Do officers behave in ways that are more likely to be perceived as fair, respectful, and trustworthy?*
- 02 *Does the training impact law enforcement officer behavior?*
- 03 *What impact does more procedurally just policing have on citizen attitudes?*
- 04 *What is the impact of more procedurally just policing on crime?*

It may seem like common sense to think that officers who are trained to treat people in fair, respectful and neutral ways will have better relationships with their community and that this will lead to stronger crime control outcomes. But there is to date little evidence that such training makes a difference with officers, citizens, or crime.³ In turn, some commentators have suggested that such “softer” approaches to policing will actually decrease the deterrence of proactive policing.⁴ Extensive, in-depth reviews of the short- and long-term effects of police training have found that we know relatively little about the impact of training programs on

3 National Research Council, *Fairness and Effectiveness in Policing* (National Academies Press, Washington, DC, 2004). “...for many decades it has been assumed that more and better police training leads to improved police performance,” but “few studies evaluate the impact of training programs on actual performance on the job.”

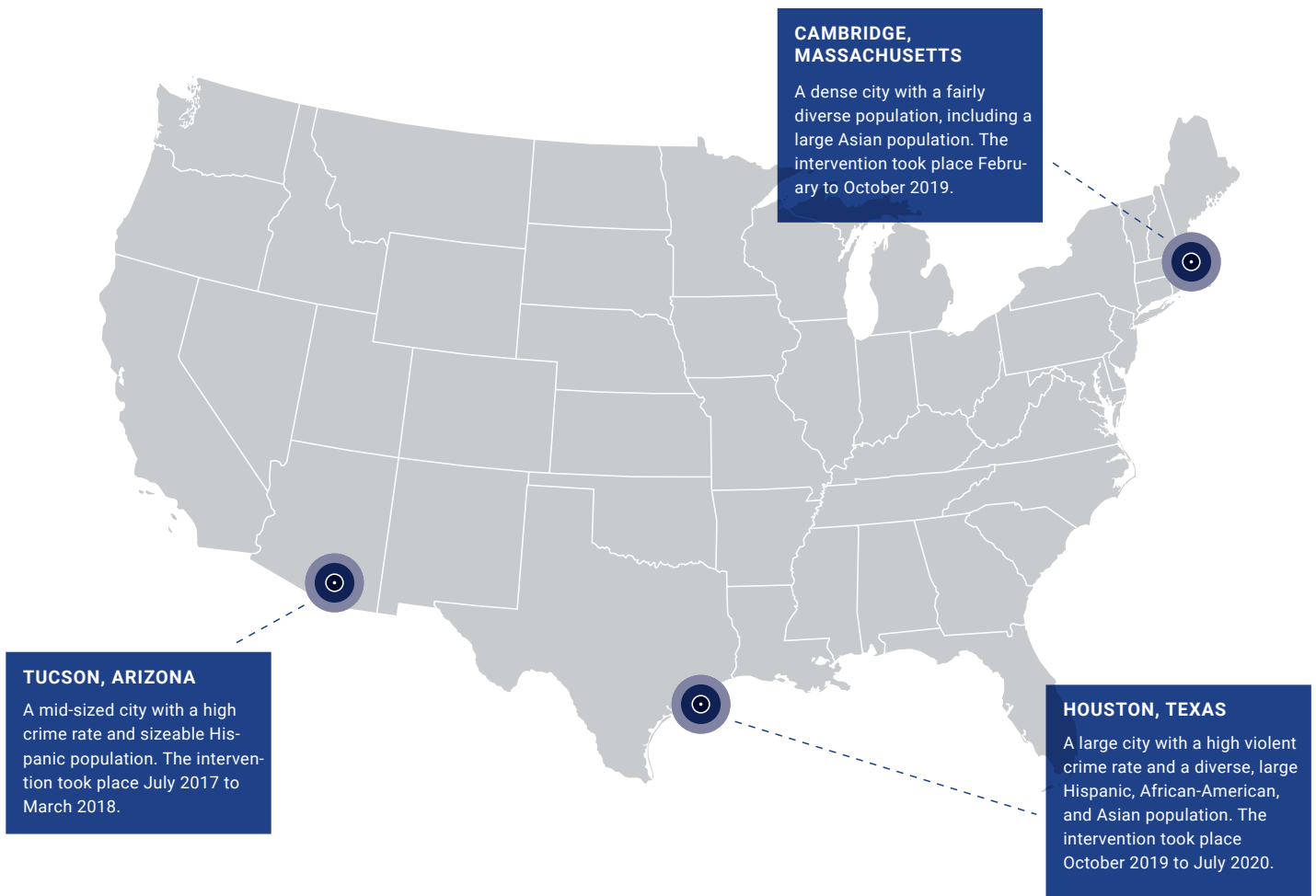
4 H. Mac Donald, Breakdown: The unwinding of law and order in our cities has happened with stunning speed. *City Journal*, 1 July 2020.



officer knowledge, attitudes, and behavior.⁵ This was the first empirical study to gather evidence about the impact of procedural justice training on police officers who work in hot spots of crime.

Officers were randomly and blindly assigned to the PJ or SC groups. Several types of data were collected and statistically analyzed to assess the differences between the PJ and SC groups: Officer behavior when interacting with citizens, arrests, resident perceptions, and crime.

The intervention lasted nine months in each city. The three cities where the experiment was fully implemented were:



5 A decade after the National Research Council's 2004 report, two key studies of police training found that we know very little about the impact of training programs on officer knowledge, attitudes, and behavior nothing: See (1) W. G. Skogan, M. Van Craen, C. Hennessy, Training police for procedural justice. *J. Exp. Crim.* 11, 319-334 (2015) and (2) C. Lum, C. S. Koper, C. Gill, J. Hibdon, C. Telep, L. Robinson, *An Evidence-Assessment of the Recommendations of the President's Task Force on 21st Century Policing – Implementation and Research Priorities* (Center for Evidence-Based Crime Policy, George Mason University, Fairfax, VA and International Association of Chiefs of Police, Alexandria, VA, 2016

The Hot Spots

A substantial proportion of crime in almost all cities is concentrated at a small proportion of streets.⁶ In each city, the research team selected 40 hot spots of crime. The selection process was extensive and required locations to be among the highest crime street segments for violent, drug, and property incidents in the past two years, along with a having high volume of citizen-initiated calls for service. Streets also had to have at least 15 accessible residential units to allow for resident survey data collection.

The 40 hot spots were then randomized into those that would be served by the Procedural Justice trained officers or the Standard Condition officers (police officers who had not received special training).

During the nine-month intervention, both groups of officers spent a good deal of time in all the hot spots, but the hot spots continued to receive standard police responses to emergency calls. So, a key question was: How much of the total policing in the procedural justice hot spots came from the procedural justice officers? How much of the total policing in standard condition hot spots came from standard condition officers?

Officers kept a daily activity log to track visits to each hot spot and how much time they spent during these visits. Analysis of the officer activity logs confirmed that a substantial part of policing in the procedural justice hot spots was indeed provided by the procedural justice officers and the same for the standard condition hot spots. Across both groups and all three sites, about half the total policing time received by these hot spots came from officers involved in the study.

How much of the total policing in the procedural justice hot spots came from the procedural justice officers? How much of the total policing in standard condition hot spots came from standard condition officers?

⁶ Y. J. Lee, J. E. Eck, S. H. O, and N. N. Martinez, How concentrated is crime at places? A systematic review from 1970 to 2015. *Crime Science*. 6, 1-16 (2017); D. Weisburd, The law of crime concentration and the criminology of place. *Criminology*. 53, 133-157, (2015).



The Officers

Selecting the Officers

Eight or 12 officers participated in each city (four or six in each condition). The agencies selected the officers, but in doing so, the researchers emphasized the importance of choosing patrol officers who would typically have been assigned to specialized teams of this type. Researchers matched the officers in terms of their background characteristics and then randomly assigned them to be in the procedural justice or the standard condition group.

Training the Officers

The officers in the procedural justice group received 40 hours of training to learn how to apply the principles of procedural justice in their work as part of hot spots policing. This included material on providing citizens voice and being an active listener, being a neutral and transparent decision maker, treating citizens with dignity and respect, and demonstrating trustworthy motives through showing care and concern. Training topics also included the role of history in building trust with communities, the importance of body language, empathy, and working with diverse populations. The officers' supervisors attended all or parts of the training. The small group size and the presence of supervisors allowed for considerable interaction and discussion of first-hand, real-life experiences, which helped reinforce the training concepts. The officers in the standard condition group received a separate four hours of training in hot spots policing and no training in procedural justice. Both groups received an explanation of the study and the value of gathering data, evaluating it, and using it to make improvements. Neither group was told about the training or instructions the other group was receiving. While officers in each group were aware another team was also doing hot spots policing work, officers were reminded on the importance of only staying in and focusing on their 20 assigned hot spots.

Impact of Training on Officer Attitudes

All officers completed a survey before the intervention started. Their responses on the sections of the survey related to procedural justice showed that both groups held similar attitudes at baseline. Officers who received procedural justice training were also surveyed afterwards to measure the impact of the training. The total number of officers was small, which makes drawing inferences difficult, but even in this small sample, the before- and after-training responses were statistically significant: Officers who received training were a great deal more likely to be aware of and support values reflecting procedural justice.

Observing the Officers and Impacts of Training on Officer Behaviors

To collect data on officer behaviors, the team used a rigorous method for drawing conclusions about police behaviors in the field called systematic social observation (SSO). (See **“What Is Systematic Social Observation?”**) Specially trained researchers accompanied officers on approximately 400 hours of ride-alongs in each city, carefully observing and documenting their encounters with citizens. They used a clearly defined protocol that produced data that could be measured and replicated.⁷

⁷ S. D. Mastrofski, R. B. Parks, J. D. McCluskey, “Systematic social observation in criminology” in *Handbook of Quantitative Criminology*, A. R. Piquero, D. Weisburd, Eds. (Springer, 2010), chap. 12.



Researchers who were trained to observe were randomly assigned to ride with officers, and assignments were rotated to ensure that multiple researchers observed each officer. Observers did not know which officers and which hot spots were assigned to which group.

Based on these systematic social observations, officers who received the procedural justice training demonstrated significantly more procedurally just behavior. They were significantly more likely to display behavior consistent with the principles of neutrality, giving citizens a voice, and treating everyone with dignity and respect. Disrespect occurred infrequently in both groups of officers, but officers who did not receive the training were significantly more likely to exhibit disrespectful behavior.

One reflection of this change in the behavior and attitudes of officers is the extent to which they used law enforcement powers such as arrests in the course of their patrols. The experiment found a significant 60 percent reduction in arrests for the PJ group comparing the intervention to pre-intervention periods.⁸

Officers who received training were a great deal more likely to be aware of and support values reflecting procedural justice.

8 Though it is important to note that in Cambridge the officers made very few arrests.

What Is Systematic Social Observation?

Carefully observing and collecting data on the interactions between officers and citizens is crucial to understanding police behavior and decision making in the field. Systematic social observation (SSO) is an advanced technique that combines qualitative and quantitative methods and offers an explicit method for observing a specific event and set of behaviors.¹

The SSO portion of the “Hot Spots Policing and Procedural Justice” study produced two types of data: (1) qualitative data via a detailed narrative documenting and describing officer and citizen behavior, and (2) quantitative data via a detailed 93-item survey about three key aspects of each encounter:

- **The Ride:** The protocol contained nine questions regarding the administrative aspects of the observation, such as the date of the ride and the start and end times of the shift.
- **The Encounter:** An encounter was defined as one that lasted at least one minute, involved three verbal exchanges, or involved physical contact or threat of physical contact. For each encounter, the observer answered 23 questions, including the location, presence of body worn camera, dynamics of the interaction, nature of the problem, characteristics of the persons involved, and so forth.
- **The Behavior:** The protocol contained 61 questions related to officer and citizen behavior, including demographics and physical and emotional state of the citizen, circumstances, and the officer’s behavior as it related to procedural justice.

Overall, the research team conducted 117 valid ride-alongs² that yielded 334 encounters and 508 interactions with citizens.

1 T. Jonathan-Zamir, S. D. Mastroski, S. Moyal, Measuring procedural justice in police-citizen encounters. *Justice Quarterly*. 32, 845-871 (2015).

2 41 in Tucson, 55 in Cambridge, and 33 in Houston.

The Residents

To understand changes in residents' perceptions of police, the team gathered data from two sources: **(1)** surveys before and after the intervention with residents in the hot spots and **(2)** follow up interviews with people who had contact with the police.

Community Survey and Impacts of the Training on Resident Perceptions

The first wave of the community survey occurred in the six months before the intervention began. The second wave occurred within 3 months of the end of the intervention period or nine to twelve months following the first wave. The researchers took a random sample of households on every block in an effort to survey 7 to 10 residents at each hot spot.

Across the pre and post surveys in all three cities, the research team completed 1,560 surveys.⁹

The research team did not find any changes in resident perceptions of police trust and legitimacy after the intervention. But after the study period, residents who lived in the hot spots assigned to the PJ group were significantly less likely to report that officers harassed people on their block or used unnecessary force compared to residents who lived in the hot spots assigned to the SC group.

Follow-up with Residents Who Had Contact with Police

Using contact information officers collected during their encounters, researchers followed up with citizens to gather data on their perceptions about the officer's behavior and the extent to which the officer demonstrated the four principles of procedural justice. While the sample of telephone surveys was small in Cambridge and Houston, across all three sites, citizens who had contact with the procedural justice officers perceived their behavior as more procedurally just than citizens who had contact with the standard condition officers.

After the study period, residents who lived in the hot spots assigned to the procedural justice group were significantly less likely to report that officers harassed people on their block or used unnecessary force compared to residents who lived in the standard condition hot spots.

⁹ The number of pre-intervention community surveys in each city were: Tucson: 328; Cambridge: 261; Houston: 277. Post-intervention surveys totaled 301 in Tucson, 230 in Cambridge, and 109 in Houston.



Crime

Two types of data were analyzed: **(1)** calls for service that were initiated by citizens and **(2)** incident data. The crime data were compared at three points: Before, during, and after the experiment. Crime incident data may underreport crime because officers must know about the crime and write a report. Citizen calls for service data may overstate the extent of crime because citizens may not have accurate information about events they observe. Additionally, in programs that emphasize community engagement, there is some evidence that citizen reporting may be inflated relative to standard policing conditions.¹⁰

A comparison of pre-intervention crime data with during-intervention crime data revealed a significant **14-percent decline** in the procedural justice hot spots compared to the standard condition hot spots.

The decline continued after the intervention ended but weakened somewhat—there was a 10-percent relative reduction in crime incidents six months after the intervention ended. As for citizen-initiated calls, there was an 11-percent relative decline during the intervention compared to the pre-intervention period, but this effect did not reach a conventional level of statistical significance.

10 D. Weisburd, C. Gill, A. Wooditch, W. Barritt, J. Murphy, Building collective action at crime hot spots: Findings from a randomized field experiment, *J Exp Crim.* 17: 161-91.

The Implications

Elected leaders, police managers, and communities looking for ways to improve the nature and outcomes from police presence in high crime hot spots now have rigorous experimental evidence that intensive and proper training can result in less crime, fewer arrests and more positive interactions leading to improved community views of the police. The study produced evidence to confirm that training officers to understand the principles of procedural justice pays big dividends day-to-day on the street. The training and subsequent nine-month intervention produced two major benefits: **(1)** lower crime and **(2)** more positive evaluations from residents.

The finding that crime went down during the intervention in the hot spots served by officers who were trained in procedural justice contradicts the common view that to be successful, hot spots policing must be heavily oriented toward enforcement tactics. The study showed that officers can be successful even when they make fewer arrests.

The theory of procedural justice in policing postulates that it increases citizen's perceptions of legitimacy of law enforcement and therefore a willingness to cooperate with the police. This study did not produce evidence of such changes in attitudes perhaps because perceptions about police legitimacy take longer than nine months to take effect, especially during a time when many were focused on multiple high-profile incidents of deadly force used by police.

Notably, the training used in this study goes far beyond any training currently provided to officers in any state. In fact, 40 hours of instruction in many topics other than a few core areas is relatively rare in the U.S. The results of this training are clear and fairly raise questions about the extent, quality and focus of current basic and on-the-job training of officers. Ultimately, state and local leaders must decide if this type of training and the hours required to instill new and enhanced techniques is worth the results of less crime, less arrests and more positive community views. However, these findings provide important evidence that special unit or assignment officers who are assigned to address high crime streets would benefit greatly from intensive training in procedural justice.

BOTTOM LINE

There is tremendous value in investing in police training in procedural justice for officers who patrol high crime areas. Officers who were trained in procedural justice were found to actually treat citizens in more procedurally just ways. They were also less likely to rely on arrests in their patrol activities, and at the same time the hot spots they patrolled had lower levels of crime. They also were less likely to be viewed as harassing citizens or using unnecessary violence than officers who did not receive the specialized training. These findings suggest that police can at the same time maximize efforts to accomplish police reform and fight crime.



About the Training

The training provided to the PJ group of officers was designed by the study team with expert guidance and assistance from a variety of organizations and partners. The training was conducted over a 5-day period. The training plan and topics included:

Day 1: Overview & the importance of trust in policing

Topics: Hot Spots Policing, Introduction to Procedural Justice and Legitimacy, & Study Overview

Day 2: The Importance of procedural justice and what procedurally just encounters look like.

Topics: Trust & Fairness in Policing, Citizen Voice, Neutrality, Dignity & Respect, Trust

Day 3: Practicing procedural justice, the importance of verbal and nonverbal communications, and working with diverse populations.

Topics: Applying Procedural Justice Scenarios, Role Playing, Understanding the Viewpoints of Others, Working with Individuals with Behavioral Health Issues

Day 4: Working with diverse populations continued, and procedural justice and hot spots policing

Topics: Working with Diverse Populations, Implicit Bias, Perspectives on the Police from Incarcerated Populations, Hot Spots Policing and Perceptions of Police, Applying Procedural Justice to Hot Spots Policing

Day 5: Intervention planning and applying procedural justice in the field.

Topics: Supervision plans, Activity Tracking, Practicing Procedurally Just Techniques in the Field, Intervention Guidelines and Planning.

More about the training can be found in the [study article](#).

Interested in further information? Contact the National Policing Institute at info@policinginstitute.org or call (202) 833-1460.